36494

National Library of Canada | Bibliothèque nationale du Canada

CANADIAN THESES ON MICROFICHE | THÈSES CANADIENNES SUR MICROFICHE

NAME OF AUTHOR/NOM DE L'AUTEUR ANNE WESTERVELT

TITLE OF THESIS/TITRE DE LA THÈSE FARMERS' MARKETS – RETAIL PRACTICES AND CONSUMER OPINIONS

UNIVERSITY/UNIVERSITÉ UNIVERSITY OF ALBERTA

DEGREE FOR WHICH THESIS WAS PRESENTED/ GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE MASTER OF SCIENCE

YEAR THIS DEGREE CONFERRED/ANNÉE D'OBTENTION DE CE GRADE 1978

NAME OF SUPERVISOR/NOM DU DIRECTEUR DE THÈSE DORIS BADIR

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/DATÉ Feb 7, 1978 SIGNED/SIGNÉ Anne Westervelt

PERMANENT ADDRESS/RÉSIDENCE FIXÉ 12223 - 42A Ave
EDMONTON, ALTA
T6J 0X5

NL-91 (3-74)

National Library of Canada

Cataloguing Branch
Canadian Theses Division

Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada

Direction du catalogage
Division des thèses canadiennes

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

THE UNIVERSITY OF ALBERTA

FARMERS' MARKETS -
RETAIL PRACTICES AND CONSUMER OPINIONS

BY

© ANNE CAROL FORRESTER WESTERVELT

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTERS OF SCIENCE

IN

FAMILY STUDIES

FACULTY OF HOME ECONOMICS

EDMONTON, ALBERTA

SPRING, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Farmers' Markets - Retail Practices and Consumer Opinions, submitted by Anne Carol Forrester Westervelt in partial fulfilment of the requirements for the degree of Master of Science.

Supervisor

DATED: October 17, 1977

Abstract

Little research has been conducted on farmers' markets although markets in Alberta have been undergoing rapid growth since 1973. Areas of concern include market management, stallholder practices and consumer usage patterns, but due to the interest of the researcher, the main area of study was the consumer. The study attempted to determine who the consumer is and why the consumer has responded so positively to farmers' markets.

A review of the literature indicated that consumers were interested in a tie with the land, personal contact, environmental concerns, an atmosphere of personal acceptance and helping the independant farmer. Given these reasons for patronizing farmers' markets, it was hypothesized that consumers at farmers' markets were trying to meet Maslow's self-actualizing (Being) needs.

Market management and stallholder practices were examined by use of a questionnaire, designed to give descriptive information. A three-part questionnaire was administered to every fifth consumer at selected markets. Part A determined demographic characteristics and market usage patterns. Part B was a Consumer Self-Actualizing Test designed by Brooker (1975). Part C was a semantic differential scale designed to determine consumers' opinions of the market.

Results indicated that there was no one sub-group who tended to use the market. Self-actualization was not a factor in use of the market. The main reason for patronizing a farmers' market was found to be very basic - simply the freshness of the produce available there.

Opinions of the markets were very positive. Older patrons with lower education and income levels were most satisfied with the present markets.

Consumers at farmers' markets are most apt to live within a four-mile radius of the market. They do only a small percentage of their total grocery shopping at the markets and visit them less than twelve times annually.

The results of this study could be used to assess the feasibility of opening new markets in Alberta. It could give guidelines to market managers in the areas where improvements are needed and what type of advertising should be conducted.

ACKNOWLEDGEMENT

The author is indebted to Dean Doris Badir for her assistance in this research project and for her valuable contributions to the overall graduate program. Dr. Murray Hawkins assisted in the research for this thesis to a large extent for which acknowledgement is due. Appreciation is also extended to the other committee members for sharing their insights and suggestions.

Appreciation is extended to the Government of Canada, Department of Agriculture for their generous funding of this research.

I would like to thank Sharon Costall for her babysitting services which relieved me of much anxiety over my daughter. Also, a thank you to my mother, Ida Forrester, for so many things throughout my life, not the least of which included emergency babysitting whenever it was needed.

Finally, a thank you to my husband Jim, without whose support and encouragement, this work would never have been completed and to my children Mariça, Erin and Andrew who did without much to enable me to pursue my studies.

TABLE OF CONTENTS

CHAPTER		PAGE
I	Introduction	1
	History of Vegetable Production	1
	Problems Involved in Increasing Production	3
	Farmers' Markets	6
II	Review of the Literature	12
	Introduction	12
	Market Management and Organization	12
	Stallholders	16
	The Consumer	19
III	Conceptual Framework	21
	Introduction	21
	Principles of Maslow's Hierarchy of Needs	21
	Preconditions for the Basic Need Satisfactions	23
	Limitations of Hierarchy of Needs	23
	Self-actualization needs	24
	Theoretical Application	26
IV	Methodology	31
	Introduction	31
	Sample	31
	Research Instruments	32
	Sample Limitations	39
	Treatment of Data	41

Table of Contents

Chapter		Page
V	Results	46
	Farmers' Markets: General	46
	Retailers	49
	Consumers - Demographic	52
	Consumers - Use of the Market	58
	Consumers - Opinion of the Market	59
	Consumers - Correlation of Variables	67
	Consumers - Self-Actualizing	72
VI	Discussion	74
	Introduction	74
	Market Management	74
	Stallholders	76
	Consumers	77
	Framework	82
VII	Limitations of the Study	85
	Introduction	85
	Market Management	85
	Stallholders	85
	Consumer	85
	Implications	87
	Recommendations for Farmers' Markets	88
	Conclusions	90

Table of Contents

Chapter		Page
	Bibliography	91
	Appendix A - Introductory Letter	96
	Appendix B - General Questionnaire for all markets	98
	Appendix C - Retailer Questionnaire	101
	Appendix D - Consumer Questionnaire	105
	Appendix E - Retailer - Descriptive Tables	112
	Appendix F - Consumer-Descriptive Tables	121

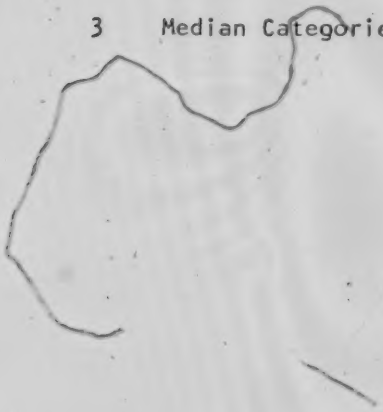
LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1	Farmers' Market in Alberta.	47
2	Demographic Characteristics of Consumers	53
3	Use of the Market by Consumers.	56
4	Shopping Habits of Consumers.	57
5	Likes, Dislikes and Use of Farmers' Markets	60
6	Consumer Assessments of Farmers' Markets	61
7	Chi-square analysis of sex of respondent with shopping patterns.	64
8	Chi-square analysis of occupation with Shopping Patterns.	65
9	Chi-square analysis of Shopping Habits with Shopping patterns	66
10	Correlation of variables with Shopping Patterns	68
11	Correlation of variables in Semantic Differential	69
12	Correlation of variables with Semantic Differential . . .	69
13	Chi-square analysis of high self-actualizers and low self-actualizers with shopping patterns and opinions	73
14	Retailer - Varieties of Produce for Sale.	113
15	Acreages Used for Production for Farmers' Markets	115
16	Labour supply for Production and Marketing of Vegetables for Farmers' Markets.	115
17	Distance Travelled to Market by Retailers	116
18	Time Spent in Marketing by Retailers.	116
19	Pricing Policies.	117
20	Methods of Estimating the Amount of Produce to Bring from the Farm	118
21	Methods of Disposing of Unsold Produce	118
22	Regular Customers of Retailers.	119

Table	Description	Page
23	Reasons for Using Farmers' Market by Retailers.	119
24	Retailers' Opinions of Markets.	120
25	Items Purchased at Farmers' Markets by Consumers.	122

LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
1	Analysis of Vegetable Supply Problems in Alberta	7
2	Content Validity - Consumer Self-Actualizing Test. . . .	36
3	Median Categories for Semantic Differential.	62



Chapter 1 Statement of the Problem

Farmers' markets have recently undergone spectacular growth in Alberta. Given government encouragement, the number of markets has increased from four in 1973 to forty in the spring of 1975. By late September, 1975, Alberta Agriculture had received 95 inquiries from groups interested in establishing markets[1].

This growth has taken place without the benefit of formalized research, either on consumer's opinions of farmers' markets or on retail practices of farmers utilizing the farmers' markets. However, the political climate, given the decline of vegetable production in Alberta has encouraged this growth. A brief history of the problems of the vegetable industry in Alberta illustrates some of the appeal the concept of farmers' markets has in government policy.

History of Vegetable Production

In the time of the pioneers, Alberta residents were self-sufficient, producing their own fresh food supplies. However, as urbanization and specialization took place, people became increasingly dependent on others to provide the basic foods. Market gardens near the larger urban centres were used to supply the city needs for vegetables until the emergence of the present supermarkets during the 1930's and the 1940's. The supermarket demanded high volume, graded, uniform quality, packaged and continual supplies of vegetables from large suppliers. With improved transportation routes and methods, plus

---

[1] Alberta Agriculture, correspondence, October, 1975. p. 2.

the development of modern refrigeration, delivery of fresh fruits and vegetables was assured throughout the year. The growing areas for these commodities rapidly became the warmer climate states of the U.S. where several crops were produced annually. Gradually, the states of California, Arizona and Texas plus Mexico grew to be the major vegetable suppliers for Alberta. The small market gardener was unable to compete with the larger foreign farms in terms of quality and continuous quantity and vegetable production in Alberta declined[2] below its actual feasibility. Today, the fresh vegetable industry in Alberta continues to function below capacity[3], [4].

Alberta's climate is well-suited to the production of cabbage, carrots, cucumbers, rutabagas and parsnips[5], [6], but even these vegetables are imported in considerable quantity. In 1974, the total harvested acreage for major fresh vegetables was 1650 acres[7]. An extensive investigation of Alberta production and marketing of vegetables by the Alberta Agricultural Products Marketing Council in 1973 projected that 4000 acres of vegetable production would meet

---

2 Porter, K.D., J. Dunn & P.D. Hargrave. A Feasibility Study to Determine the Requirements for the Expansion of the Fresh Vegetable Industry in Alberta, (Alberta Department of Agriculture.) 1967, p. 4.

3 Alberta Agricultural Products Marketing Council, An Inquiry into the Production & Marketing of Vegetables in Alberta. (Alberta Agriculture), 1973. pp. 47-49.

4 K.D. Porter, J. Dunn & P.D. Hargrave, op.cit. pp. 4-9.

5 Ibid. p. 5.

6 Alberta Agriculture, "Internal memo". (Feb. 6, 1975.)

7 Ibid.

Alberta's yearly requirements for cabbage, carrots, cucumbers, rutabagas and parsnips. Export potential to Saskatchewan, British Columbia and the north-western United States would support vegetable production on an additional 4000 acres, raising the total projected acreage for vegetable production to 8000 acres.

Problems Involved in Increasing Production

Although the potential market is available and the land is suitable for vegetable production, the task of increasing this production is difficult. Under present conditions in Alberta, vegetable production is a high risk proposition for farmers. Risk occurs in the following areas: (1) inefficient marketing system, (2) lack of market information, (3) lack of quality standards, (4) lack of storage facilities, (5) vertical integration in the food market, (6) limited availability of credit.

(1) Inefficient marketing system

The vegetable farmer is penalized for the lack of an effective and efficient marketing system[8]. In Alberta, the marketing channels for fresh vegetables are relatively disorganized. Few farmers produce to the capacity of needing a wholesaler; thus, many sales involve direct selling to consumers and retail outlets. Many of these transactions take place in an atmosphere of price-cutting which, in turn, lowers the price that wholesalers are willing to pay larger producers.

(2) Lack of market information

With the small amount of acreage in Alberta committed to vegetable

---

8 Frederick L. Thomsen. Agricultural Marketing. (New York: McGraw-Hill Book Co. Inc., 1951.) pp. 70-84.

production, there has been little need for, nor have many attempts been made to provide farmers with market information[9]. This lack of information means that each farmer sets his own price schedule for the produce; a procedure which can lead to price cutting in order to move the produce quickly.

(3) Quality Standards

Consumers are becoming more quality conscious and are willing to pay the higher prices for higher quality produce[10, 11, 12]. Grading, packaging and storage all relate to quality[13]. Facilities for these are lacking in Alberta and the facilities are expensive[14]. The lack of facilities contributes to an inconsistent quality of vegetables being marketed, until the term Alberta-grown has become synonymous with poor quality in the minds of some consumers.

(4) Storage Facilities

Alberta's climate is such that most vegetable crops are limited to one crop per season. There are few storage facilities for

---

9 Alberta Agricultural Products Marketing Council. Op.cit. p. 47.

10 M.W. Smith & W.E. Cravens. "Retail Farmers' Markets as a Means of Direct Sales to Consumers." (Ohio Agricultural Experiment Station, [1962], Research Bulletin 913). p. 3.

11 James S. Toothman. "How Pennsylvania Producers Use Farmers' Markets to Increase Sales and Profits." Text of illustrated presentation made at Fifteenth Annual Roadside Marketing Conference, Columbus, Ohio. (6 January, 1975). p. 13.

12 Robert Cobbledick, correspondence to the author. (8 April, 1976). p. 2.

13 Richard Kohls & W. David Downey. Marketing Agricultural Products. 4th ed. (New York: The Macmillan Co., 1972.) pp. 267-306.

14 K.D. Porter, J. Dunn & P.D. Hargrave, op.cit. p. 71.

vegetables in Alberta[15] which means that most of the production is ready for market at the same time. This, in effect, may lower the price of the vegetables when the market is saturated for a relatively short time.

(5) Vertical Integration

The retail sale of fruits and vegetables in Alberta is dominated by one supermarket chain[16]. This organization has expanded its influence and ownership from the retail level through the wholesaling, canning, freezing, warehousing and producing levels. Since most of the production occurs in the warmer states of the U.S., it is guaranteed on a year-round basis, and adequately supplies the retailer's needs. Contracts from farmers in Alberta may only fill part of the total supply needed. Relinquishing the American contracts where supply is known to meet needs and relying on Alberta production where supply is not year round for fresh vegetables is a risky proposition for the supermarket.

(6) Limited Availability of Credit

Credit institutions view vegetable production in Alberta as a high risk venture and correspondingly charge high interest rates for loan capital for expansion of vegetable production[17]. Consequently, growers are reluctant to take this risk until prices

---

15 Ibid.

16 D.G. Devine & M. Hawkins. "Implications of Improved Information on Market Performance." Journal of Consumers Affairs. 6 (No. 1, 1972.) p. 184.

17 Alberta Agricultural Products Marketing Council, op.cit. pp. 11-12.

and returns can be stabilized. The farmer usually will not take the risk of large-scale vegetable production until a satisfactory market is guaranteed. Markets traditionally will not guarantee to take the farmer's produce unless a sufficient quality and quantity is available.

Quality would be improved with the availability of more storage, weighing and grading stations. However, these facilities are expensive to build, especially with high risk, high interest capital. Unless supplies and markets are guaranteed, few financial institutions will risk the money needed for these facilities.

Summary of Problems

1. Wholesalers do not handle Alberta produce because it is not available in the quantity and quality they need.
2. Grading, packaging and storage facilities are lacking because inadequate returns due to low sales volume do not warrant expanding facilities with high interest capital.
3. Producers cannot supply the necessary quality and quantity because they lack the storage, packing and grading facilities.
4. Producers do not make sufficient profit from their endeavours because the market system and market information is limited due to the small size of the industry. Due to these limitations, pricing procedures are not formalized to a large extent and price-cutting creates problems.

As a result of the above, limited amounts of Alberta produce reach the market because wholesalers do not have enough. The circularity of the problem is schematically outlined in Figure 1.

Farmers' Markets

After an intensive study of the fresh vegetable industry in Alberta, the Alberta Agricultural Marketing Council in 1973 recommended the establishment of an all-Commodity Marketing Board combining all

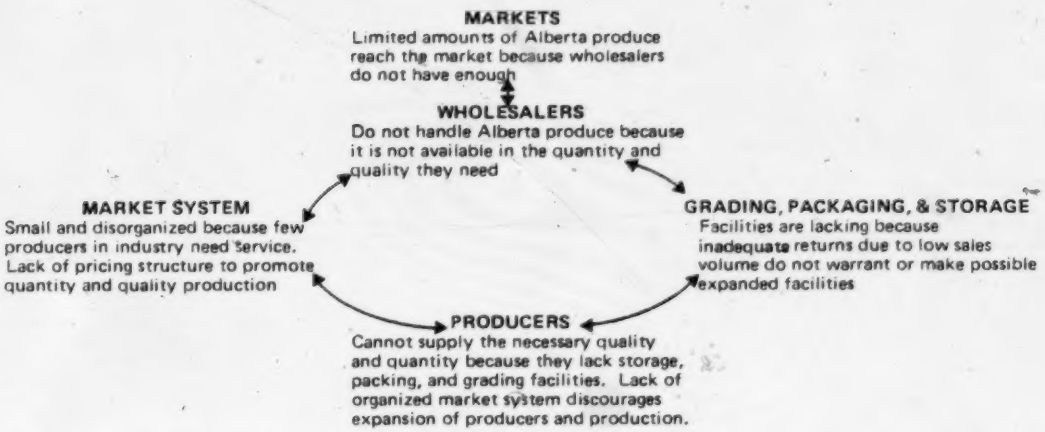

MARKETS
Limited amounts of Alberta produce reach the market because wholesalers do not have enough
WHOLESALERS
Do not handle Alberta produce because it is not available in the quantity and quality they need
MARKET SYSTEM
Small and disorganized because few producers in industry need service. Lack of pricing structure to promote quantity and quality production
GRADING, PACKAGING, & STORAGE
Facilities are lacking because inadequate returns due to low sales volume do not warrant or make possible expanded facilities
PRODUCERS
Cannot supply the necessary quality and quantity because they lack storage, packing, and grading facilities. Lack of organized market system discourages expansion of producers and production.

Figure 1. Analysis of Vegetable Supply Problems in Alberta.

Adapted from Alberta Agricultural Products Marketing Council, p. 49

the commodities under one board[18]. A minor recommendation involved the encouragement of farmers' markets in Alberta. This would involve several producers operating together to make direct sales of their products to consumers from a specific location. The rationale in this suggestion was to encourage the small producer to grow and market fresh vegetables without the necessity of expensive selling, grading, storage and processing facilities[19]. In 1973 Alberta Agriculture initiated a study of the feasibility of farmers' markets in Alberta. In view of the historical (1973-1976) growth of the markets from this time, this minor recommendation has assumed major proportions.

Areas of Research

Response to the concept of farmers' markets in Alberta is obviously positive. However, formalized research has to be conducted

---

18 Ibid. p. 2.

19 Toothman, op.cit. p. 10.

to answer:

1) What constitutes a farmers' market in Alberta?

2) What is needed to establish a market?

3) What does the stallholder need?

4) Why does a stallholder select a farmers' market to fulfill the marketing function?

5) Who is the consumer who uses the farmers' markets?

6) Why has the consumer responded so positively to farmers' markets?

Summary of Existing Knowledge

The literature reviewed shows a lack of definitive knowledge in the area of farmers' markets. Nowhere is there even an attempt to formally define a farmers' market. Most of the research has been on market management and organization and the findings vary considerably. There is little consensus on the best location for a market. Population requirements for establishment of a market vary from 100 thousand families to 3,000 people. Days and hours of operation are not set on any definitive basis. Toothman is able to list many advantages for the stallholder[20], but there is little formal research attempting to answer why a grower chooses a farmers' market to sell his produce. The consumer at a farmers' market is also neglected. With the exception of Faryna's government study[21] which basically projected consumers' opinions of farmers' markets if they were available, no research has been done in Alberta. In selecting

---

20 Ibid. p. 10.

21 Paulette Faryna. Farmers' Markets in Alberta: A Study of Consumer Attitudes and Usage Patterns. (Alberta Agriculture, 1973.

a market site, Smith and Cravens[22] and Alberta Agriculture[23] suggest that it must be in an area where the potential consumer will support it, but the lack of knowledge of the consumer makes this a haphazard selection process at best.

All of the areas of research are important, but due to the interest of this researcher, the focus of this paper is on the consumer. Other questions are examined briefly and preliminary suggestions are forthcoming. However, it remains to the interest of further researchers to examine more adequately the other problems.

From the knowledge gained, it is hoped that farmers' market boards will be able to meet more nearly the needs of the consumer. The consumers should benefit by the communication of their opinions to the farmers' market boards[24].

Research Questions

To examine the questions, who is the consumer and why has he responded so positively to farmers' markets, the researcher looked at the consumer from three aspects.

1. On a demographic basis who is the consumer?
2. The Alberta Consumer does not suffer from limited food supplies. His physiological need for nourishment is not dependent on his individual hunting and farming skills. Consequently, he has the freedom to choose where he will purchase his food supplies. In

---

22 M.W. Smith & W.E. Cravens, op.cit., p. 21

23 Alberta Agriculture, "To the Management" [at Farmers' Markets] (date unknown). pp. 1-4

24 Linda Ewanyk. "Potatoes - Consumer Opinions & Retail Practices" (M.Sc. thesis, University of Alberta, 1972). p. 4.

most instances in Alberta the consumer has the time and the money to allow all his food purchases to be made in the supermarket. Since the consumer is supporting farmers' markets, there are other reasons for choosing them, than purely meeting physiological needs. Faryna's study indicated some consumer rationale for using the market which included,

a) tie with the land, the good earth, natural, organic

b) helping the small independent farmers

c) friendly personal service

d) atmosphere of acceptance

e) environmental problems such as overpackaging, etc. minimized[25]

These reasons for desiring to use a farmers' market rather than the existing supermarkets, appear to be related to Maslow's[26] concept of higher needs in human motivation.

Maslow considers that human motivation results from a hierarchy of needs, the most basic of which are the physiological needs. Since in most instances, the Alberta consumer has met his physiological needs, he is free to move toward the higher needs of safety, love and belonging, self-esteem and finally moving towards self-actualization.

> Gratification [of a need] releases the organism from the domination of a relatively more physiological need, permitting the emergence of other, more social goals . . . But a want that is satisfied is no longer a want. The organism is dominated and its behavior organized only

---

25 Paulette Faryna. op.cit., (Alberta Agriculture, 1973) pp. 40, 41, 50-52.

26 Abraham, H. Maslow. "A Theory of Human Motivation", in Dominance, Self Esteem and Self Actualization: Germinal Papers of A.H. Maslow. ed. Richard Lowrey. (Calif.: Brooks/Cole Publishing Co., 1973) pp. 153 - 173.

> by unsatisfied needs. If hunger is satisfied, it becomes unimportant in the current dynamics of the individual.[27]

On the basis of Faryna's consumers and Maslow's theory, the author asked if self-actualization was a motivating factor in consumer's use of farmers' markets.

3. As well as knowing the type of consumer who is apt to frequent the markets, a knowledge of the opinions of these same consumers towards the market would be beneficial to the market manager and the stallholders to enable them to provide more nearly for the desires of the consumer. The semantic differential scale as developed by Osgood, Suci and Tannenbaum[28] is seen by Nunally as "probably the most valid measure of connotative meaning available".[29] Mindak indicates that the semantic differential can provide very useful information in marketing situations:

> "This knowledge can be quite useful . . . . . in spotting weak areas which might need to be strengthened or strong areas which might need to be emphasized."[30]

The opinions that consumers hold about the market, not only are of benefit to the market management and to the stallholders, but also help to identify why the consumer has responded positively to farmers' markets.

---

27 A.H. Maslow. Motivation and Personality. 2nd editon. (New York: Harper and Row Publishers, 1970). p. 38.

28 Charles E. Osgood, George J. Suci and Percy H. Tannenbaum. The Measurement of Meaning. (Chicago: University of Illinois Press, 1957.

29 J.C. Nunnally. "Introduction to Psychological Measurement." (New York: McGraw-Hill Book Co., 1970). p. 443.

30 Wm. A. Mindak. "Fitting the Semantic Differential to the Marketing Problem", in Semantic Differential Technique. Ed. James G. Snider & Charles E. Osgood. (Chicago:Aldine Pub. Co., 1969). p. 623.

Chapter II Review of the Literature

A search of the literature on Farmers' Markets in the areas of Marketing and Consumer Behavior has revealed very little research[1].

Farmers' markets can be regarded from three differing viewpoints including: (1) Market Management and Organization; (2) the Stallholder (retailer) selling through the market; (3) the Consumer. The examination of the literature will focus on these areas.

1. Market Management and Organization

A. Physical Requirements

The location of the market is an important factor in its probable success. Cobbledick[2] is adamant that marketing facilities should be located as close as possible to existing shopping facilities in order to obtain maximum exposure at minimum promotion expense. Alberta Agriculture places more importance on closeness to suppliers; that is in the country - also close to a major highway. Toothman[3] is of the opinion that markets

---

1 Computer searches were initiated utilizing ORBIT DATABASE (Smithsonian Science Information Exchange) CAIN and ERIC (Lockheed Retrieval Services) and no literature in this area was found. A search was made of Ph.D. abstracts and again no information was found. The Canadian and American Journals of Agricultural Economics were searched for the past ten years and no articles were discovered on Farmers' Markets. Letters were written to several people active in the field of marketing including Dr. M.E. Cravens, Mr. R. Cobbledick, Mr. R. Varian and Mr. J. Toothman, which resulted in the discovery of one study in 1962 by Dr. Cravens. Alberta Agriculture commissioned a study of consumer opinions of Farmers' Markets in 1973 by P. Faryna, a marketing officer.

2 Robert Cobbledick. op.cit., p. 3.

3 James Toothman, op.cit., p. 11

can be established wherever a suitable low-cost location can be obtained. (ie. parking lots of industrial plants, shopping centers, sports facilities, fair grounds, schools or other public lands.) All stress the need for adequate parking space. A summary of physical needs includes:

1) adequate marketing facilities at a reasonable price.

2) adequate parking facilities.

3) location adjacent to existing traffic patterns.

4) knowledge of efficient physical layout of farmers' markets.[4]

Alberta Agriculture[5] and Smith and Cravens[6] suggest an assessment of the neighbourhood to ensure it has the type of family who would patronize farmers' markets.

B. Producer Recruitment

In Ontario the most successful markets have a high number of stallholders:

MARKET	INSIDE STALLS	OUTSIDE STALLS
Kitchener	331	190
Hamilton	180	37
Niagara Falls	35 - 40	-
Hagersville	80	

These large numbers of stallholders and the resultant variety of items draw more potential customers[7].

---

4 M.W. Smith and H.E. Cravens, op.cit. p. 21.

5 Alberta Agriculture. "To the Management" [of Farmers' Markets] (date unknown).

6 M.W. Smith and H.E. Cravens, op.cit. p. 21.

7 Robert Cobbledick, op.cit. p. 3.

Smith and Cravens recommend that the following conditions be met before establishing a market:

1) There should be enough potential volume of fresh fruits and vegetables available [for the market needs] in a 30 to 50 mile radius.

2) For each major product item, there should be at least 3 to 4 growers who are interested in developing a farmers' market.

3) There should be 10 - 15 or more growers available for all product groups to create a healthy "market" atmosphere.

4) The interested producers should be willing to diversify production to insure an adequate supply and selection of fresh farm products to attract customers.[8]

The establishment of a program for the procurement of products from growers in other states (provinces) and distribution of these products to farmers' markets would assist small markets to round out their product lines[9]. Cobbledick is of the opinion that most producers selling from farmers' markets are small farmers, since the amount of hand labour involved limits the interest of large producers[10]. As well, Toothman confirms the amount of hand labor and time required to load, transport, unload and set up displays[11]. Often, the small producers have to buy other products from neighbours to round out product lines[12].

---

8 M.W. Smith & W.E. Cravens, op.cit., p. 21.

9 James Toothman, op.cit., p. 12.

10 Robert Cobbledick, op.cit., p. 2.

11 James Toothman, op.cit., p. 11.

12 Robert Cobbledick, op.cit., p. 2.

C. Population Requirements

The population requirements for a farmers' market are extremely varied. Smith and Cravens[13] recommend between 25,000 and 100,000 families in a five mile radius before establishing a market. Ontario research suggests a minimum population of 20,000 in a fifty mile radius[14]. Alberta recommends that a market can be successful in a trading area with a population of 5,000[15]. Toothman indicates one market starting in a rural town with less than 3,000 population. He stresses, however, that this market will probably be more important as a summer social experience than as a contributor to farm income[16].

D. Days and Hours of Operation

The hours for operation of a farmers' market are changing with the change in consumer shopping habits. The preponderance of food shopping in Edmonton and Calgary is done Thursday, Friday and Saturday[17]. Cobbledick[18] indicates a change in consumer shopping to evening and Saturday afternoon. He questions the wisdom of markets opening at five or six on

---

13 M.W. Smith and W.E. Cravens, op.cit., p. 21.

14 Paulette Faryna. "Report on Tour of Ontario Farmers' Markets." (Dec. 12, 1973. p. 4.)

15 Alberta Agriculture and Farmers' Market Committee. (Date unknown)

16 James Toothman. op.cit., p. 10.

17 Sheila McFadyen. Consumer Food Shopping Habits. (Alberta Department of Agriculture, June, 1974). pp. 12-14.

18 Robert Cobbledick, op.cit., p. 3.

a Saturday morning when most consumers are still sleeping. As more women join the labor force, the patterns of evening and late Saturday shopping should become even more predominant. Toothman illustrates some successful markets with evening hours (ie. 6:30 - 10:00 p.m.) only[19]. Alberta Agriculture suggests that a Sunday farmers' market could be suitable in some instances[20]. Smith and Cravens[21] think that the selection of marketing days and hours should be those most satisfactory to the customers in the area.

II. The Stallholders

A. Advantages to the Producer

A producer who decides to use a farmers' market for retail selling of his produce has several advantages:

1) No capital investment in land or building is required.

2) Many markets do not require a lease or fixed term of occupancy, particularly for outdoor stalls. This provides flexibility in the use of the market and limits the payment of stall rentals to the times when the seller has produce to sell.

3) Rentals are reasonable, ranging from $2.50 to $10 per market day for stall space ranging from six to twelve feet in width.

4) There is an established public patronage in existing markets, providing many potential customers without individual sellers incurring the expense of advertising.

5) Farmers' markets provide a means of retailing for producers whose farm locations are not suited for the operation of a roadside stand.

---

19 James Toothman, op.cit., p. 8.

20 Alberta Agriculture. "To the Management". p. 4.

21 M.W. Smith and W.E. Cravens, op.cit., p. 21.

6) Merchandise can be sold at more than one location by renting space in different markets.

7) Sales work and management responsibility for the producer selling at farmers' markets only is confined to the days of the market operation.

8) In heavily populated markets, growers sell large quantities in a few hours.[22]

Alberta Agriculture[23] also considers that the ease of starting to sell at farmers' markets is a distinct advantage. Many producers are able to make the farmers' market a total family involvement with family members doing the actual selling and, in so doing, supplementing the family "cash" income. In many areas, a farmers' market is a seasonal venture, leaving the stallholder free of commitment to the market at certain times of the year.

Oftentimes, vegetable crops are grown near heavily populated areas on small farms, but on land of high value per acre. These small holdings may not be sufficient to fully employ the farmer and family members. Under such conditions, some producers have found it beneficial to increase effectively their business by incorporating the marketing function.[24]

B. Disadvantages to the Producer

The disadvantages to the producer include the additional labor and time to load, transport, unload and set up displays.

---

22 James Toothman, op.cit., pp. 10-11.

23 Alberta Agriculture. "Thinking about being a Supplier to the Farmers' Market. (date unknown). p. 1.

24 M.W. Smith & W.E. Cravens, op.cit., p. 3.

There is less flexibility of adjusting harvesting to the rate of sale (as compared to a roadside market)[25]. Outdoor markets have the additional problems of varying weather conditions.

C. Problems for the Producer at the Market

In many new markets, problems arise between the producer and the market manager. In Alberta, Lloyd Hausher compiled a list of expectations from producers to market managers.

1) Need for distinct written guidelines.
2) Need for input and regular meetings of the participants in a market.
3) Need for rules or guidelines to be established by a committee of managers and stallholders.
4) Need for enforced quality guideline.
5) Need for control of numbers of non-agricultural product stalls.
6) Need for regular stall assignment for regular producers.
7) Need for stall identification.
8) Need for organized image.
9) Need for adequate parking.
10) Need for increased advertising.[26]

These concerns were echoed by Dietrich Kuhlmann[27] and Lois

---

25 James Toothman, op cit., p. 11.

26 Lloyd Hausher. "Concerns and Suggestions of Vegetable Producers to the Farmers' Market Managers." Text of a talk to the third annual Alberta Farmers' Market Seminar. (11 Mar., 1977). p. 3.

27 Dietrich Kuhlmann. "Message from the Alberta Fresh Vegetable Marketing Board." Text of a talk to the third annual Alberta Farmers' Market Seminar. (11 Mar., 1977). pp. 1-2.

Hole[28], speaking as producers at the annual Alberta Farmers' Market Conference in Edmonton, March 11, 1977.

III. The Consumer

Farmers' markets in Alberta and North America have undergone a resurgance in the 1970's serving a two-fold purpose. They have increased the direct sales of the farmer to the consumer; they have responded to the consumer's feelings of nostalgia. Kuhlmann summarizes the consumer's feelings with his observation, "Farmers' markets remind us of the time when farming was still a way of life - when things were not so hectic and there were less demands on our time"[29].

In Faryna's study on consumers and farmers' markets, consumers indicated they wanted an atmosphere and product which was sufficiently different from the supermarket to make them exert the extra effort involved in making the trip to the market. The concept of a market seems to be a symbol of the consumers' tie with the land, the "good earth" and their way of helping the small independent farmer[30]. Many consumers also expressed a desire for food in as natural a state as possible, without unnecessary packaging and they also expressed a concern for the environment[31].

---

28 Lois Hole. "Farmers' Markets from a Producer's Standpoint." Text of a talk to the third annual Alberta Farmers' Market Seminar. (11 March, 1977). pp. 1-2.

29 Dietrich Kuhlmann, op.cit., p. 1.

30 Paulette Faryna, op.cit., p. x.

31 Alberta Agriculture. "Alberta Farmers' Markets." (Oct., 1975) p. 1.

Faryna[32] found that there was no sub-group more prone to shop at the market than others. All age groups and ethnic groups were equally likely to shop at a market.

Smith and Cravens[33] examined the consumer profile for one Cleveland market, but the age of the study precludes the usefulness of this information, since it predates the nostalgia and environmental concern era.

Eiler & Rosenfeld researched the consumer profile for selected roadside markets in New York. This study found a majority of shoppers were females, between the ages of 25 and 44, with an average household sixe of 3.6. Over 80% of the consumers lived within six miles of the market. About two-thirds (2/3) of the consumers had family incomes between $5,000 and $15,000. The largest occupational group to use these markets was the professional, technical and managerial sub-group[34]. It must be noted that Eiler and Rosenfeld's survey was conducted at roadside markets, not farmers' markets and a direct relationship to farmers' markets is not possible.

---

32 Paulette Faryna, op.cit., p. iv.

33 M.W. Smith and W.E. Cravens, op.cit., pp. 9-19.

34 Doyle A. Eiler and David G. Rosenfeld. "Customers at Selected New York State Roadside Markets." (Cornell University Agricultural Experimental Station, New York: Cornell University, 1973.) pp. 3-10).

Chapter III Maslow's Hierarchy of Needs: A Conceptual Framework

The conceptual framework underlying this thesis is Maslow's Hierarchy of Needs. It has been chosen because it deals with the individual's growth and motivation and has as its major concern the development of the self-actualizing individual.

The present chapter offers a brief summary of the basic concepts of the hierarchy of needs and its relation to self-actualization. The application of this approach to the consumer at the farmers' market is also given. Maslow has stated that "the pursuit and gratification of higher needs have desirable civic and social consequences"[1]. It is the author's hypothesis that utilization of a farmers' market is directly beneficial to the individual farmer and to the promotion of interpersonal contact. Consequently, it is hypothesized by the author that self-actualizing people would more probably use the farmers' market than would the individual who is meeting basic needs.

Principles of Maslow's Hierarchy of Needs

Maslow's theory was formulated on the basis of a unique premise. Maslow contended that personality theory should be based on a study of the healthiest personalities, rather than the abnormal psyche. He contended that research on healthy personalities would give information on the best methods of functioning.

> . . . No theory will be adequate that rests simply on the statistical description of the choice of unselected human beings . . . . Only the choices and tastes and judgments of healthy human beings will tell us much about what is good for the human species in the long run. The choices

---

1 A.H. Maslow, Motivation and Personality. p. 49.

of neurotic people can tell us mostly what is good for keeping a neurosis stabilized.[2]

From his study of the healthiest personalities, Maslow proposed five heirarchical categories of needs:

1. Physiological needs - these include the needs of the body for food, water and air.
2. Safety needs - these include security, stability, dependency, protection, freedom from fear, need for structure, order, law, limits.
3. Love and affection and belongingness needs - these include affection as distinct from the biological need for sex and belonging, the need for family and friends.
4. Esteem needs - the need for a) strength, achievement, adequacy, independence and freedom and b) need for status, recognition, attention, appreciation.
5. Self-actualization needs - need for self-fulfillment - tendency for one to become actualized in what one is potentially.[3]

The first four categories are defined by Maslow as the deficiency needs and are scaled hierarchically in order of importance. They are basic biological needs and are likened to the need for salt, or calcium or Vitamin D because:

1. their absence breeds illness.
2. their presence prevents illness.
3. their restoration cures illness.
4. under certain (very complex) free choice situations, they are preferred by the deprived person over other satisfactions.
5. they are found to be inactive, at a low ebb, or functionally absent in the healthy person.[4]

---

2 A.H. Maslow. Toward a Psychology of Being. p. 151.

3 A.H. Maslow. Motivation and Personality. pp. 35-47.

4 A.H. Maslow. Toward a Psychology of Being. p. 22.

Maslow believes that man is instinctively good, but that the need for self-actualization (Being needs) can easily be inhibited by social mores and by the lack of satisfying the Deficiency needs. Deficiency needs are stronger and until they are met (at least in part) there is no emergence of Being-needs.

Once the physiological needs are met, then the need for safety becomes predominant. When met, they in turn are supplanted by love needs, which give way to esteem needs. If all the basic dependency needs are met, at least in part, then the need for self-actualization emerge

If there is difficulty in meeting the Deficiency needs, then neurotic needs may develop which make it difficult, if not impossible to reach self-actualization.

Preconditions for the Basic Need Satisfactions

Maslow believes that certain environmental or societal needs must be present before basic needs can be met. He lists such conditions as:

> "freedom to speak, freedom to do what one wishes, as long as no harm is done to others, freedom to express oneself, freedom to investigate and seek for information, freedom to defend oneself, justice, fairness, honesty, orderliness in the group are examples of such preconditions for basic need satisfactions."[5]

The removal or absence of these societal conditions can create a threat similar to the removal or absence of the basic needs.

Limitations of Hierarchy of Needs

Although, in general, the hierarchy of needs is relatively fixed, Maslow[6] notes that there are some exceptions. With some people,

---

5 A.H. Maslow. Motivation and Personality. p. 47.

6 Ibid. pp. 51-53.

the need for esteem is more important than the need for belongingness. Chronic deprivation of the more basic needs can lead to the loss of desire for the higher needs. Gratification of all the basic needs early in life can lead to such strong and unified characters that they can withstand the loss or frustration of these basic needs for prolonged periods. There are also some individuals who are able to reach the Being needs with little gratification of the Deficiency needs.

Maslow[7] also cautions against viewing the hierarchy of needs too precisely. Later needs can emerge before total gratification of the previous needs. For instance, the love and belonging need may only be 25% gratified, the safety need 50% gratified, the physiological need 60% gratified, and the self-esteem needs may start to emerge. However, it is the unsatisfied needs that have the most influence on behavior. Once a need has been met, it has little effect on motivation.

Self-actualization needs.

Under self-actualization, Maslow identifies 16 separate needs. These Being needs, however, are unlike the Deficiency needs in that they are equally potent, whereas Deficiency needs can be hierarchically scaled. The Being needs include:

1. Efficient perceptions of reality - more apt to perceive what there is, rather than their own wishes, and have comfortable relations with it.

2. Acceptance of self, others and nature - sees human nature as it is and not as they would prefer it to be.

---

7 A.H. Maslow. "A Theory of Metamotivation: The Biological Rooting in the Value Life." in H.M. Chang & Abraham H. Maslow, ed. The Healthy Personality: Readings. (New York: Van Nostrand, Reinhold Co., 1969). p. 43.

3. Spontaneity, simplicity, naturalness - behavior is marked by simplicity and naturalness and by a lack of artificiality or straining for effect.

4. Problem centering - problem-centered, rather than ego-centered.

5. Quality of Detachment: Need for privacy - positively like solitude and privacy to a definitely greater degree than the average person.

6. Autonomy: Independence of Culture and Environment - dependent for their own development and growth on own potentialities and latent resources.

7. Continued freshness of appreciation - capacity to appreciate again and again, freshly and naively, the basic goods of life with awe, pleasure, wonder and even ectasy.

8. Mystic experience: Peak experience - tremendous intensification of any of the experiences in which there is a loss of self; a transcendence of it.

9. Feeling for mankind - have for humans a deep feeling of identification, sympathy and affection.

10. Interpersonal relations - deeper and more profound interpersonal relations.

11. Democratic character structure - can be, and are friendly with anyone of suitable character regardless of class, education, political belief, race or color.

12. Discrimination between means and ends - means and ends are clearly distinguishable. In general, fixed on ends rather than means, and means are definitely subordinated to these ends.

13. Philosophical, unhostile sense of humor - consider humor more closely allied to philosophy than to anything else.

14. Creativeness - special kind of creativeness or originality or inventiveness.

15. Resistance to enculturation - maintain a certain inner detachment from the culture in which they are immersed.

16. Resolution of dichotomies - many oppositions thought to be intrinsic merged and coalesced with each other to form unities.[8]

---

[8] A.H. Maslow. Motivation and Personality. pp. 144-180.

Essentially, this framework is saying that man's inner nature is intrinsically good, and given certain freedoms by society, man can grow to full self-fulfillment or self-actualization by a hierarchy of basic needs being met.

Theoretical Applications for the Study of Hierarchy of Needs of Consumers at Farmers' Markets

Using Maslow's theory, it can be inferred that self-actualizing consumers will be likely to buy products which serve society's interest and would involve active interaction with others.

Faryna's findings indicated that consumers use farmers' markets for some of the following reasons:

a) tie with the land, the good earth, natural, organic

b) helping the small independent farmers

c) friendly personal service

d) atmosphere of acceptance

e) environmental problems such as overpackaging, etc. minimized.[9]

With the concern of many people regarding the possibility of world food shortage and pollution problems[10], both helping the independent farmer and minimizing environmental problems can be seen as serving society's interest. Friendly personal service involves active interaction with others. The feelings for mankind and the acceptance of self, others and nature can be found in the atmosphere of acceptance

---

9 Paulette Faryna, op.cit., pp. 40, 41, 50-52.

10 Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III. The Limits to Growth. (New York: The New American Library, Ind., 1972.) p. 200.

at farmers' markets. This author viewed the tie with the land, the good earth as symptomatic of the desire of people to reduce the complexities of modern living and return to simpler times where there was closer contact with other people and with nature, which can be related to feelings for mankind and continued freshness of appreciation. Therefore, it could be hypothesized that people who tend to utilize farmers' markets will be working on meeting some of the Being needs. Users of farmers' markets will either be beginning to self-actualize or actually self-actualizing.

Brooker (1975) studied the purchase of products designed to minimize ecological damage to the environment. Results showed statistical association at the .004 between self-actualizers and purchasers of low-phosphate detergent[11]. Using the same measurement scale, Brooker (1975) also studied blood donors. Some slight statistical significance ($p < .11$) was found between regular blood donors and self-actualizers.[12]

Empirical testing of Maslow's theory is most limited. Only Brooker has conducted published research in consumer behavior and the need-level hierarchy. Several studies have been conducted which attempt to measure need-level in the work situation. Porter[13], [14], Rhinehart,

---

11 George Brooker. "An Instrument to Measure Self-Actualization" in Mary Jane Schlinger, Ed., Advances in Consumer Research. Vol. 2, (Chicago: University of Illinois, 1975). p. 571.

12 Ibid.

13 Lyman W. Porter. "A Study of Perceived Need Satisfactions in Bottom and Middle Management Jobs." in Journal of Applied Psychology, Vol. 45. (No. 1, Feb. 1961). pp. 1-10.

14 Lyman W. Porter. "Job Attitudes in Management." in Journal of Applied Psychology. Vol. 46. (#6, Dec., 1962) pp. 375-384.

Barrel, De Wolff, Griffin and Spanner[15] and Goodman[16] studied need-levels in various job levels. Their results showed a stronger need for self-actualization as more predominant at the upper levels of management. The lower-order of needs, safety and love and esteem did not appear predominant, one over the other. All studies utilized an instrument devised by Porter which may not effectively measure hierarchy of needs. As well, all the studies were cross-sectional in nature and did not test the dynamic growth aspect of Maslow's theory.

Huizinga[17] utilized a different instrument and found support for the hierarchy of basic needs. His study also suffered from being cross-sectional rather than longitudinal.

Hall and Nougaim[18] completed a 5 year longitudinal study on 49 managers. They found no strong evidence for Maslow's hierarchy of needs. However, their small sample size, plus the fact that the data were based on post hoc coding of unstructured interviews that were not designed to produce data relevant to Maslow's theory could have limiting effect on the data. Maslow would not conceive of 5 years as being adequately representative for a test of his theory.

---

15 J.B. Rhinehart, R.P. Barrell, A.S. DeWolfe, J.E. Griffin & F.E. Spanner. "Comparative Study of Need Satisfactions in Government and Business Hierarchies". in Journal of Applied Psychology, Vol. 53. (#3, June 1969). pp. 230-235.

16 R.A. Goodman. "On the Operationality of the Maslow Need Hierarchy." in British Journal of Industrial Relations. Vol. 6. (#1, March 1968). pp. 51-57.

17 Gerald Huizinga. Maslow's Need Hierarchy in the Work Situation. (Groningen: Wolters-Noordhoff Publ., 1970). pp. 1-196.

18 Douglas T. Hall & Khalil E. Nougaim. "An Examination of Maslow's Need Hierarchy in an Organizational Setting." in Organizational Behavior & Human Performance 3. (1968). pp. 12-39.

> "He conceives of a long time period between the emergence of various need levels. He suggests that in the fortunate life history, the safety needs are salient and satisfied during childhood, the affiliation needs during adolescence and the esteem needs during early adulthood. Only as a person nears his 50's generally will the salient needs become strongest needs."[19]

Lawler and Suttle[20] also completed a two-part longitudinal study, but the study encompassed only 6 months and 1 year. Again, they used the Porter (1961) questionnaire designed to measure need satisfaction and need importance. The data collected from the analysis offered little support for the view set forth by Maslow that human needs are arranged in a multi-level hierarchy. They cautioned, however, that Maslow's theory still had not been adequately tested and required far more empirical evidence before it was accepted or dismissed.

Alderfer[21] found more support for his concept of a 3-level hierarchy of needs than Maslow's 5-level. His concept also differs from Maslow in that he believes that lack of satisfaction of higher-level needs increases the salience of lower level needs. Alderfer also assumes that all needs are simultaneously active and thus, prepotency does not play as major a role in his theory as it does in Maslow's. Alderfer also cautions that he disagrees with Maslow and his results may be affected by that bias.

---

19 Ibid. p. 32.

20 E.E. Lawler III & J. Lloyd Suttle. "A Causal Correlation Test of the Need Hierarchy Concept." in Organizational Behavior and Human Performance. Vol. 7. (#2, April, 1972). pp. 265-287..

21 Clayton P. Aldefer. "An Emperical Test of a New Theory of Human Needs." in Organizational Behavior & Human Performance. Vol. 4. (#2, May, 1969). pp. 142-175.

Walsh[22] attempted to devise a method for testing Maslow's constructs. His statements reflecting need levels were accepted in a ratio of better than 75% by a panel of judges, but the judges' classifications did not agree with Walsh's own at this high a level. By utilizing the test however, he did find some support for Maslow's theory showing differences in need levels with divergent socio-economic groups and similarity of need levels within relatively homogenous socio-economic groups.

Interest remains for Maslow's theory as a viable explanation of human personality even with conflicting research findings. The concept of self-actualization (or growth) needs is well accepted. The difficulties lie in the lower-level needs and their relative position.

This study is concerned, not with the needs as hierarchy, but with the degree of self-actualization. Consequently, the research findings do not negate the use of this framework as an indicator of the self-actualizing consumer.

The author is of the opinion that the questions who is the consumer and why has the consumer responded positively to farmers' markets can be answered in part by use of Maslow's framework. It is her hypothesis that users of farmers' markets will be working on meeting some of the self-actualizing needs and they are using the market precisely to meet these needs. The null hypothesis, therefore is:

Consumers who use farmers' markets will not be self-actualizing.

---

22 T.M. Walsh. "Maslow's Theory of Motivation: A Theory for Testing the Constructs." (Ph.D. Dissertation: Univ. of Oregon, 1968).

Chapter IV Methodology

The main purpose of this study is to determine the type of consumer who utilizes the farmers' markets, with emphasis on the consumers' self-actualization level. Corollary interests involve the market management and the stallholder who chooses the farmers' market to sell his produce.

In this chapter, the experimental design is described. Information regarding the sample, sampling procedures, the test instruments used, and the procedures used in the administration and scoring of the tests are included. The treatment of the data by statistical methods is discussed as well.

The Sample

Market Management

All of the farmers' market managers in Alberta (as of June 8, 1976) were contacted by letter (see Appendix) and informed of the study project. The managers were contacted within two weeks of the letter's arrival and were requested to answer a factual questionnaire regarding their use of the market. (A copy of the questionnaire is found in the Appendix).

Stallholders

At farmers' markets in Morinville, Vegreville, Edmonton Southgate, Ponoka, Red Deer, Edmonton City, Alberta Beach, Bon Accord, Stony Plain, Camrose, Leduc and Wetaskiwin the stallholders who were selling fresh produce were given a questionnaire in a pre-addressed, stamped envelope. (In Edmonton City and Red Deer, every third stall selling fresh produce was given a questionnaire, due to the large number of

stalls.) Each stallholder was informed of the nature of the study and requested to complete the questionnaire as soon as possible and mail it to the researcher. (A copy of the questionnaire is found in the Appendix.)

Consumers

At farmers' markets in Morinville, Vegreville, Edmonton Southgate, Ponoka, Red Deer, Edmonton City, Alberta Beach and Bon Accord, interviews were conducted by 2 interviewers who were posted at the exits. At Edmonton City, 3 interviewers were used due to the large numbers of consumers. Every fifth adult leaving the market was stopped and asked to complete the interview schedule. If they refused, the next person to leave the market was sampled. (A copy of the interview schedule is found in the Appendix.) This process, referred to as systematic random sampling, has the advantage that every person who stops at the farmers' market has an equal opportunity of being selected to complete the questionnaire. The purpose of survey sampling is to select a sample which will accurately describe the total population[1], [2]. Given that everyone has an equal probability of being selected, a generalization to the total population may more reliably be made.

Pretest

A pretest of the consumer interview schedule was conducted at Stony Plain Farmers' market and in a Consumer Behavior class. Questions

---

1 Earl R. Babbie. Survey Research Methods. (California: Wadsworth Pub. Co., 1974). pp. 83-92.

2 F.N. Kerlinger. Foundations of Behavioral Research. (New York: Holt Rinehart & Winston Inc., 1964). p. 52.

that were found to be difficult or ambiguous were modified or rejected.

A pretest of the stallholder's questionnaire was conducted at Stony Plain. No ambiguities or difficulties were experienced by the retailers and the schedule remained unaltered.

Research Instruments

The questionnaire devised by the researcher for market management consisted of factual information only. The basis for the questions was taken from Smith and Cravens[3] study and from questions presented by Toothman[4] and Cobbledick[5].

The questionnaire devised by the researcher for stallholders was also a factual questionnaire. Again, the basis for the questions was arrived at using the study by Smith and Cravens[6] and Toothman's[7] talk to the Ohio Roadside Market Conference and correspondence from Cobbledick[8].

The questionnaire for consumers consisted of 3 parts: parts A, B, and C.

Part A

Part A was concerned with demographic characteristics and per-

---

3 M.W. Smith and W.E. Cravens, op.cit. p. 24.

4 James Toothman, op.cit. p. 13.

5 Robert Cobbledick, op.cit.

6 M.W. Smith & W.E. Cravens, op.cit.

7 James Toothman, op.cit.

8 Robert Cobbledick, op.cit.

sonal use of the market. It consisted of closed choice questions for demographic data and three open-ended questions designed to determine what consumers liked and disliked about the market and why they used the market.

Part B

Part B was designed to give the researcher information regarding the consumer's personality-type based on Maslow's hierarchy of needs.

Kassarjian reviewed the relationship between consumer behavior and personality types. He found a general lack of correlation, but stated "that 5% or 10% of any portion of the variance can be accounted for by personality variables measured on *ill-chosen and inadequate instruments*, (italics are this author's) is most remarkable"[9]. He does not then reject the possibility of correlation between consumer behavior and personality. Kassarjian recommends that "consumer behavior researchers must develop their own definitions and design their own instruments to measure the personality variables"[10]. Consequently, part B was the adaptation of a questionnaire designed by George Brooker in his studies of self-actualizing consumers[11]. This section was developed to determine the self-actualizing level of the consumer.

The original questionnaire by Brooker contained 20 items. These were modified by this researcher to allow for use by consumers whose

---

9 Harold H. Kassarjian. "Personality Theory and Consumer Behavior: A Review". in Perspectives in Consumer Behavior. ed. H.H. Kassarjian & T.S. Robertson. (Ill.: Scott Foresman & Co., 1973). p. 142

10 Ibid., p. 140.

11 George Brooker. "An Instrument to measure Consumer Self-Actualization" in Mary Jane Schlinger, ed. Advances in Consumer Research, Vol. 2. (Chicago: University of Illinois, 1975). pp. 563-575.

mother tongue was not English. The revised schedule was presented to two impartial judges to determine that the modifications had not altered the meaning. Following the pre-test, three questions were omitted.

Reliability

Brooker established reliability of this instrument by two tests. He initially examined the instrument with a group of 30 M.B.A. students. A test-retest reliability figure of .57 (Spearman correlation, $p. < .01$) was obtained, but because of questionable test conditions, the reliability was retested with a more heterogeneous sample of 24. The test-retest reliability figure of .67 (Spearman correlation, $p < .01$) was obtained.

Validity

The measure most suitable for judging the validity of part B was content. Content validity refers to the adequacy with which the area of the subject matter (self-actualization in this case) was covered.

Maslow[12] identifies sixteen character traits of the self-actualizing person. The test presented in Figure 2 (p. 36) contains items from the sets written to match fourteen of these characteristics identified by Maslow. The traits missing are creativeness and peak experience.

A test of concurrent validity was conducted by Brooker. In his works, Maslow indicated that self-actualization became more predominant in later life. Brooker tested this construct by dividing his sample into 2 parts: those below 26 years of age and those over 26 years. Utilizing a Chi-Square test, self-actualizing characteristics were found to be more predominant in the sample over 26 ($p < .015$).

---

12 A.H. Maslow. Motivation & Personality. pp. 149-180.

Figure 2 Classification of Self-Actualizing Traits in Consumer Self Actualizing Test.

		Characteristic, Trait
1. *A	I prefer using information from magazines like *Consumer Reports* when making expensive purchases.	Detached
B	I prefer to talk to friends and relatives to learn their experiences with appliances and other expensive items, before I make a purchase.	
2. *A	Usually, I am not upset when products are not as good as I thought they would be .	Accepting of Oneself, Others
B	I am often upset when products are not as good as I thought they would be.	
3. *A	When I help a friend buy something, it's enough to know that my help was needed.	Feeling for Mankind
B	When I help a friend buy something, I think that it's only right that my friend thanks me for my help.	
4. *A	All people are worthy of respect.	Democratic Character Structure
B	Some people are not worthy of respect.	
5. A	It is more fun to give a gift than to decide what to give.	Resolution of Dichotomies
*B	Deciding what to give for a gift is as much fun as giving it.	
6. A	I usually feel more confident when I know I am dressed in the latest fashion.	Spontaneity, Simplicity
*B	I am at ease regardless of how I am dressed.	
7. *A	When I am shopping for myself, I make decisions without help from others .	Detached
B	I often look to people I know for help when buying something for myself.	
8. A	Money may not be everything, but it's got a big lead over whatever is second.	Means-End Relationships
*B	It's true, money can't buy happiness.	
9. *A	The things that I want in my life are often different from the things that my friends want.	Autonomy, Independence
B	The things that I want in my life are similar to the things that my friends want.	
10. A	I am often bored.	Freshness of Appreciation
*B	I am seldom bored.	
11. *A	I enjoy doing volunteer work for the community and for charities.	Problem-centered
B	I am so busy with my own life that I can't manage volunteer work.	
12. A	I prefer comedians who imitate famous people such as John Wayne.	Sense of humour
*B	I prefer comedians who comment on the present time, (politics, Olympics).	
13. A	When I go on a buying spree, I often regret it later.	Accepting of self, others
*B	I seldom regret a buying spree.	
14. *A	Being in fashion holds no interest for me.	Resistance to Enculturation
B	It is important to me to be in fashion.	
15. *A	When I am nervous or anxious, I usually try to avoid buying things.	Perceptions of reality
B	When I am nervous or anxious, I often find buying something new helps me feel better.	
16. A	It is usually wise to present yourself to people in such a way that they will like you.	Interpersonal Relationships
*B	It is unwise to present anything but your true self to people.	
17. A	I am reluctant to try new products until I can find out if they're good.	Perceptions of Reality
*B	I often try new things because they look interesting or good.	

* Self-actualizing Response

Part C

Part C of the consumer survey was the semantic differential scale developed by Osgood, Suci and Tannenbaum (1957).

> The semantic differential is essentially a combination of controlled association and scaling procedures. We provide the subject with a concept to be differentiated and a set of bipolar adjectival scales against which to do it, his only task being to indicate for each item the direction of its association and its intensity on a seven-step scale.[13]

This device was chosen since it measures mainly *connotative* aspects of meaning, particularly the evaluation connotation[14]. It is also flexible, quick and economical to administer[15]; all factors of importance in the construction of a brief questionnaire.

Mindak suggests that for marketing problems, certain alterations can be made with the semantic differential and yet the ease of applying the instrument and the reliability and validity can be maintained. He suggests that descriptive nouns and phrases can be inserted instead of the bipolar adjectives used by Osgood, and non-polar opposites can be used for the descriptive phrases to avoid centrality[16].

The dimensions were selected utilizing the research findings of Martin[17] who determined the dimensions used to evaluate foods and the marketplace using a sample of 20 persons in Edmonton. From the 41 dimensions for foods and 32 dimensions of food stores, 17 were selected that

---

13 C. Osgood, G. Suci & P. Tannenbaum, op.cit. p. 20.

14 Jum Nunnally Jr., op.cit. p. 441.

15 F.N. Kerlinger, op.cit. p. 578.

16 William Mindak, op.cit. pp. 619

17 Heather Martin. "Dimensions Used to Evaluate Foods in the Marketplace". (M.Sc. thesis, University of Alberta, 1976).

appeared most applicable to farmers' markets. The researcher included an eighteenth category which did not appear in Martin's study. This was the dimension "adequate highway signs for market . . . inadequate highway signs for market".

An unbroken line was utilized in the pretest questionnaire to avoid the problems of degree of space between the steps. However, it was found to be too confusing for the consumers and a seven-step scale was adopted as recommended by Osgood[18], Green & Rao[19] and Hughes[20].

Validity

Content validity is the adequacy with which the instrument tests what it propounds to test. This instrument was devised using the research findings of Martin (1976) using projective techniques. Consequently, the validity factor was high for her population. Validity studies of the semantic differential as designed by Osgood, Suci & Tannenbaum indicate validity correlations between the semantic differential and the Thurstone scales to be as high as .74 to .81[21].

Reliability

Reliability of an instrument is considered to be the degree to which the same scores can be reproduced when the same objects are measured

---

18 C. Osgood, G. Susi & P. Tannenbaum, op.cit. p. 85.

19 Paul E. Green & Vithala R. Rao. "Rating Scales and Information Recovery - How Many Scales and Response Categories to Use". Journal of Marketing 34. (July, 1970). p. 38.

20 G. David Hughes. Attitude Measurement for Marketing Strategies. Illinois: Scott Foresman & Co., 1971). p. 94.

21 C. Osgood and P. Tannenbaum. "The Principle of Congruity in the Prediction of Attitude Change" in ed. Martin Fishbein, Readings in Attitude Theory & Management. (N.Y.: John Wiley & Sons. Inc., 1967). p. 301.

repeatedly. For this particular semantic differential, a test of the reliability was not made. However, in tests for the reliability of Osgood's semantic differential, there have been satisfactory results. A test-retest of 40 different scales, testing 20 concepts using 100 subjects produced a coefficient of .85. Tests by Soloman and Wilson on the semantic differential gave a probabliity evaluation of .01 on test-retest of the instrument[22]. Fishbein and Raven in an adaptation of the scale had a correlation significant beyond the .01 level using a sample of 43. Nunally reports that frequent findings for reliability have a coefficient alpha as high as .80[23].

Sample Limitations

Market Management: All of the market managers were enthusiastic about the study and complied with answering the questionnaire, with the exception of one manager who did not have a telephone and did not respond to 3 letters.

Stallholders: It would have been preferable to interview the stallholders at the market; however, this was often impossible due to the number of consumers at the time. This meant relying on a mail-return of the data. Use of the mailed questionnaire presents two limiting factors: (1) possible lack of response and (2) the inability to check the responses given[24]. The lack of response is a difficult area, since

---

22 C. Osgood, G. Suci & P. Tannenbaum. op.cit. pp. 128-129

23 Jum Nunnally, Jr. op.cit. p. 444.

24 F.N. Kerlinger. op.cit.

the characteristics of the non-responders could differ greatly from the responders. Response rates below 40% are common; high percentage returns are low.

When there are low response rates, valid generalizations cannot be made.

Consumers The research design depended on the cooperation of every fifth consumer. In small markets, the number of responses obtained by using this criterion could be too small to present any validity. In large markets, the number of people present and the length of the questionnaire meant that often more than 5 consumers would leave while the interviewer was questioning a consumer. As with the mailed questionnaire, a problem arises with the non-respondents in that it is not known whether they have different characteristics to the respondents.

The sample bias obtained by soliciting the cooperation of the consumer could alter the probability of obtaining statistically relevant characteristics of the consumer[25].

The layout of the different markets could affect the response rates of consumers. Markets with many exits could not be adequately covered by the interviewers. Similarly, markets with one entrance/exit would make crowding a problem and present difficulties in finding a suitable place to conduct the interview. Some of the layouts and locations of the market could make it difficult to tell indeed who were consumers at the market and who were shopping in adjacent areas.

---

25 Robert Rosenthal & Ralph L. Rosnow. Artifact in Behavioral Research. (New York: Academic Press, 1969).

TREATMENT OF DATA

Market Management

The market management questionnaire was analyzed for descriptive data only. Results of the questionnaire were compiled manually to yield a chart outlining places where the markets were held, sponsors, time and hours of operation, size of markets, and names and addresses of market managers. Rental fees and distance from the business section of town were also included. Market managers were also asked if they had ever moved the location of the market and, if so, why this had been done. They were also encouraged to venture opinions as to why consumers shopped at farmers' markets. Manual tabulations were done on these two questions.

Stallholders

The stallholders' questionnaire was also analyzed for descriptive data only. The questionnaire was coded by the researcher and the coding was keypunched onto IBM computer cards. The data was analyzed using a program from the Statistical Package for the Social Sciences, SPSS.[26]

Consumer

All questions including the open-ended questions were coded. Open-ended questions were coded by listing all the responses given for a particular question. Categories were then formed so that like responses would be grouped into a single category. The information obtained from each questionnaire was transformed to computer data sheets, keypunched onto IBM computer cards and processed by the computer, again using programs from SPSS.

---

26 Normal H. Nie, G. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, Dale H. Bent. Statistical Package for the Social Sciences. 2nd ed. (New York, McGraw-Hill Book Co. 1975).

In order to describe the consumer in terms relevant to farmers' market management, the information questions were analyzed on the basis of a correlation matrix. Four variables were coded in nominal scale, sex, occupation of respondent, occupation of spouse and shopping habits. These variables had to be analyzed on the basis of chi-square analysis, since the nominal scale measurement prohibited more advanced analysis. To obtain valid chi-square results, the following variables had to be collapsed; age from 6 to 2 categories, education of wife and husband from 7 to 4 categories, occupation of respondent from 7 to 5 categories, occupation of spouse from 7 to 5 categories, income from 6 to 5 categories, number of annual visits from 6 - 2 categories, distance travelled from 6 to 3 categories, and amount shopped from 6 to 3 categories. The semantic differential scale was collapsed from 7 to 3 categories and the shopping habits collapsed from 8 to 2 categories.

All variables coded in ordinal or higher measurement scales were analyzed. Kendall's tau was used as the statistical measure since Kendall's coefficients are somewhat more meaningful than Spearman's rank order coefficient when the data contains a large number of tied ranks.[27]

For both chi-square analysis and for Kendall's tau, the null hypothesis was only rejected at a probability of .05 or less.

The analysis of the Consumer Self-Actualizing Test (CSAT) required several alterations. During the process of collecting the data, this author became aware of serious deficiencies in the test. An analysis of the questions with the Social Desirability Scale (Crowne and Maslow,

---

[27] Ibid., p. 289.

1964)[28] revealed that four questions were heavily weighted in favour of socially desirable answers, while two others were probably socially acceptable responses. These responses weighed in favour of self-actualization; therefore, during the analysis, questions 3, 4, 6 and 16 were rejected as definitely favouring socially acceptable responses and questions 10 and 14 were rejected as probably eliciting socially acceptable answers.

The author had further reservations about this test and undertook a factor analysis of the instrument. Factor analysis showed that with an eigenvalue of .5 or higher there were eleven factors contributing to the test. An eigenvalue of 1.0 accounted for only 56% of the variance. The remaining factors with an eigenvalue of less than 1.0 were so closely grouped that it was not possible to discount any of the remaining factors. Although this test indicated robust testing of 11 factors, the author was still not satisfied with the validity of the test and decided to use only the very high scorers and the very low scorers to test the hypotheses. Scores were determined by assigning a score of 2 for a self-actualizing answer, a score of 1 for a non-self-actualizing answer and a score of 0 for no answer. The results were totalled and a ratio obtained from the total points scored and the total possible points for each individual considering the number of questions answered. Originally, the author intended to compare the scorers one standard deviation above and one standard deviation below the mean, but abnormal distribution rendered this technique unuseable. Therefore, use of the interquartile range was selected comparing scorers

---

28 John P. Robinson and Philip R. Shaver. Measures of Social Psychological Attitudes. (Michigan Institute for Social Research, 1973). pp. 727-732.

in the top quartile with scorers in the bottom quartile.

Using these two sub-populations, the chi-square test was performed. If the author is correct in her hypothesis that self-actualizing people would tend to use farmers' markets for purchase of vegetables, it would seem apparent that high self-actualizers would use the market more often, buy more there, be happier with the market and more limited in their dislikes of the market. These actions would be indicative of meeting several of the self-actualizing needs including accepting the self and others, problem centered, means-end relationship, feeling for mankind and perceptions of reality.

To further test the validity of the results, the x^2 test for age and sex was performed on the same sub-population, since it has been found that women score higher on self-actualizing measures than men[29] and Maslow reported that self-actualizers were older members of the population.[30] The chi-square on the sub-populations should indicate more women than men and older members.

Chi-square testing on the data as originally coded led to meaningless results because too many cells had fewer than 5 responses. Siegel notes that the x^2 test should not be used when more than 20% of the expected frequencies are smaller than 5 or when any expected frequency is smaller than 1[31]. To overcome this problem, the data was

---

29 H.M. White. "An Investigation of some Characteristics of High and Low Self Actualization and Their Relationship to Alienation from Self and Society." cited by G. Brooker, op.cit., p. 571.

30 A.H. Maslow. Motivation and Personality. p. 150.

31 Sidney Siegel. Nonparametric Statistics. (New York: McGraw-Hill Book Company, 1956). p. 46.

collapsed as indicated earlier to give a meaningful description to the data.

The following null hypotheses were tested:

1. The sex of the high self-actualizers will be the same as the low self-actualizers.

2. The age of the high self-actualizers will be the same as the low self-actualizers.

3. The distance travelled to the market will be the same for high self-actualizers as for low self-actualizers.

4. The number of visits to the market will be the same for high self-actualizers as for low self-actualizers.

5. The percentage shopping done at farmers' markets will be the same for high self-actualizers as for low self-actualizers.

6. The opinions of the market will be the same for high self-actualizers as for low self-actualizers.

Chapter 5 Results

Farmers' Markets: General

Farmers' markets are sponsored by a variety of associations, including the local agricultural society, Chamber of Commerce or exhibition society. Several markets have no organizational sponsorship, but are run by a group of interested people.

The markets vary in restrictions for selling. Many have no restrictions but where there are some imposed, they revolve around growing or making any produce or products that are offered for sale.

The markets in Alberta vary from small with only two stalls to the large city markets with an average of 55 stalls. The rental fee does not appear to be based on market size and they vary considerably.

Most of the markets in Alberta have a restricted selling period from May to October or shorter, but a few of the larger markets are open year round.

The times and days of operation differ in various localities. A favoured day is Saturday, but Sunday, Wednesday, Thursday and Friday selling also have some popularity. Markets in Alberta generally do not follow the traditional early opening hours, but have adjusted to consumer demands and open later in the morning. A few markets have adapted the idea of evening shopping which caters to the working family.

All the markets offer a full selection of vegetables with most of them also selling eggs, handicrafts, home baking and honey. Other markets offer specialty items such as raw wool at Stoney Plain.

Parking facilities vary from excellent in most locations to very

FARMERS' MARKETS IN ALBERTA

TABLE 1

Name of Market	Sponsor	Location	Number of Stallholders Min.	Ave.	Max.	Months of Operation	Days/Hours of Operation	Market Manager	Rental Fee	Distance from Business Section
Alberta Beach	Alta. Beach District Agricultural Society	Community Hall	16	18	22	Periodic-May-Oct 1976 May 24, June 19 & 24 July 10, Aug 2 & 28 Sept 6, Oct 9	Sat/Mon 12-3	Mrs. Ruby Swartz 924-2449	$2. Daily	0 Miles
Barrhead	Exhibition Assoc.	Arena	3	6	10	June - mid Oct	Saturday 10-2	Mr. A. Macauley 674-3351	$10. Seasonal $2.50 Daily	1/4 Mile
Bon Accord	Agricultural Society	Arena	6	7	12	July - end Sept	Wednesday 3-6	Mrs. Pat Reichle 921-3535	10% of Sales	1/4 Mile
Bonnyville	Agricultural Society	Agrimart	3	8	15	Full Year	Saturday 11-1 " (May-Oct) 11-3	Mrs. Helen Kuniski 826-5786	$3. Daily	1/2 Block
Calgary-Agrimart	Alta. Livestock Co-op	Agrimart 2003 McKnight Blvd, NE		55-60	75	Full Year	Sat 8-2, Wed (mid July-Sept) 8-2	Mr. Garry Moore 276-1191	$10. Daily	7 Miles
Calgary-Golden Acres	Private	Golden Acres Nursery 420-48 A , NE		5	7	July-mid Oct	Everyday 9-6	Mr. Wade Hartnell 274-4286	Negotiated	4 Miles
Camrose	Camrose Agri. Soc.	Fairgrounds	7	10	25	Yearly	Saturday 8:30-1	Mrs. Shirley Garbe 672-4371	$100. Seasonal	1 Mile
Champion	Private	Service Station Hwy 4W Service	0	4	10	Yearly	Sat/Sun 8-8	Mrs. Roberta Davis 897-3868	10-15% of Sales	2 Miles
Drayton Valley	Agricultural Society	Winter - Elks Hall Summer - Curling Arena	6	12	33	Yearly	Wednesday 2-5	Mrs. Bobby Goddard 542-5368	$3. Daily	0 Miles
Edmonton-Bay-Londonderry	Bay	Londonderry Shopping Centre	9	12	24	July 22-Sept 9	Thur 6-8:30 Fri 6-8:30 Sat 9:30-1	Mrs. Arlene Hall	$5. Weekend	7 Miles
Edmonton-Bay-Southgate	Bay	Southgate Shopping Centre	9	12	24	July 22-Sept 9	Thur/Fri 6-8:30 Sat 9:30-1	Mrs. Arlene Hall 424-0121 Ex 417	$5. Weekend	7 Miles
Ft. Assiniboine	Agricultural Society	Curling Rink	8	11	15	July 16 - mid Oct	Friday 1:30-5	Mrs. Barbara Lewis 584-5565	$1. Daily $5. Seasonal	0 Miles
Grand Centre	Agricultural Society	Hockey Rink	8	9	23	June - Sept	Thursday 5-8	Mr. L. Mitchel 594-3805	$3. Daily	0 Miles
Grande Prairie	Agricultural Society	Fairgrounds	6	12	18	Yearly	Saturday 10-12	Mr. Dennis Lank 532-4005	$3. Daily	3/4 Mile
High Prairie	Home Prod. Collective	Arena	5	10	20	July - Sept Irregular	Saturday 11-3	Mr. Terry Anderson 523-2506	$3. Daily	1 Block
Innisfail	Agricultural Society	Arena	6	7	12	15 Weeks-Starting July 8 - Oct 14	Thursday 11-3	Mrs. F. Churchill 227-3002	$2. if over 6 stalls	1/4 Mile
Lac La Biche	Horticulture Society	Recreation Centre	5	7-10	15	May - Oct	Friday 3-5:30	Mrs. Kathy Lawson 623-4657	$2. Daily $10. Seasonal	1/4 Mile
Leduc		Hockey Rink	7	10	12	Aug - Oct	Thursday 1-6	Mrs. Ed Balzer 986-3787	$2. Daily (Sm. Table) $3. Daily (Lg. Table)	1/4 Mile
Lethbridge	Exhibition Assoc.	Arena		35	50	Aug - Oct	Wednesday		$10. Seasonal	1 Mile

Lloydminster	Co-op	Outdoor Facilities at Shopping Centre	8	15	25	May - Oct	Thursday 5-9	Mrs. Joan Sloan 825 2737	$10. Seasonal	4 Miles
Morinville	Sturgeon Agri. Society	Curling Arena	1	5-7	12	July - Oct	Saturday 10-12	Mr. Ken MacKenzie Box 54, Royal Bank	$1. Daily	1/4 Mile
Peace Valley Producer's Co-op	Co-op	West End of Bridge		5	14	Aug - Sept	Five Days 2-6	Mr. W.J. Henderson 338-2128	$5. Daily	1/2 Mile
Pincher Creek	Agricultural Society	Arena		18	21	June - Nov	Every Other Friday 2-6	Mrs. Elaine Raczka 627-3062	10% to Max of $5.	1/4 Mile
Ponoka		Arena-50th Ave					Wednesday 11-2	Mr. Steve Phalempin 783-4092		
Red Deer	Co-op	Outdoor Facilities at Fairgrounds	18	30	40	May -	Saturday 8:30-12-30	Mr. Dennis Moffat 346-6443	$2. Daily	1/2 Mile
St. Paul	None	Recreation Centre	1	5	8	June -Oct	Saturday 11-2	Mr. Terry Zellweger 645-3193	$2. Daily	1/2 Mile
Sangudo										
Sedgewick	Agricultural Society	Recreation Centre	4	8-9	12	July - Oct	Every Other Saturday 12-2	Ms. Carol Arntzen 384-2180	$2. Daily	1/2 Mile
Stettler	Agricultural Society	Arena	3	7	14	June - Aug	Friday 9-12	Mr. Dick Gabriel 742-2793 or Mr. Steve Bogdanovich 742-2585	$1. Daily	1/2 Mile
Stony Plain	Agricultural Society & Chamber of Commerce	Community Center	12	21	30	May - Feb	Saturday 10-2	Mr. Doug Laurie 489-5523	$3. Daily	1/2 Block
Strathmore	Agricultural Society	Recreation Centre	10	14	21	June - Sept	Saturday 10-1	Mrs. Jeannette Murray 934-3607	$.50-$3. Depending on Stall Size	1 Mile
Thorhild (Long Lake Provincial Park)		Arena-Auction Mart	4	6	8	June - Sept	Friday 12-3 Sunday 3-6	Mr. Art Tilma 398-3993	$1. Daily	1/2 Mile
Tofield	Horticultural Society	Arena		26	28	May 1 - Oct 1	Saturday 1-6	Mrs. Peter Brown 662-2651	$4-5. Daily	1/4 Mile
Valleyview	Agricultural Society	Polar Palace	2	7	9	May - Oct	Saturday 1-2:30	Mrs. Pat Hoedl 524-2658	$1. Daily	0 Miles
Vegreville	Exhibition Board	Centennial Mall	7	10	16	Yearly	Friday 10-1	Mr. Fred Duke 632-2687	$35./6 Months $50./Yearly	1/4 Mile
Vermilion	Livestock Co-op	Agrimart	0	3	6	Yearly	Tuesday 9-	Mr. Bert Duncan 853-5372	$2. Daily	2 Miles
Wetaskiwin		100F Hall	6	10	10	May - Oct	Friday 10-3	Mrs. Elaine Dorchester 352-3484	$3. Daily	0 Miles
Whitecourt	Chamber of Commerce	Outside Town Entrance	1	2	4	May - Oct	Saturday 10-3	Mr. Helmut Kreiner 778-3776	$5. Daily	1/8 Mile
Wildwood	Agricultural Society	Fairgrounds	5	7	11	May - Oct	Friday 3-6	Mr. Ernie Vankouky 786-4649	$2. Daily	1/4 Mile
Edmonton-City	City of Edmonton	102 Ave. and 97 St.	30	50	65	Yearly	Mon-Fri 8-6 . Sat 7-6 Closed Wed - Sept thru June	Mr. Trembley 425-7694	$1.50 3'x3' $3.3'x3' plus shelves	0 Miles

poor in Edmonton City. Use of buildings such as arenas, exhibition facilities or agri-marts ensure good parking, but many of these buildings are removed from the centre of town.

Promotion techniques are used by all markets, but not all markets make use of information bulletins and recipes from Alberta Agriculture.

Market managers are found at all markets and in most cases the position is a voluntary one. According to the managers themselves, duties range from "everything" to collecting the stall fees only. Although most of the markets are very new (3 years or less), there have already been 12 moves in the 43 markets. Reasons for moving most often expressed were a need for larger facilities, distance required to travel for consumers and high rentals.

The managers overwhelmingly endorsed the concept of the freshness of the produce as the reason consumers shopped at the market. Price was also mentioned frequently with the notation that the consumer originally thinks that the prices will be cheaper but is not upset when she finds that they are not lower than supermarket prices. The atmosphere of old-fashioned nostalgia and friendliness was considered by nine managers to be an important reason for using farmers' markets.

Details of the market managers responses are found on Table #1.

Retailers

Questionnaires were given to sixty-five retailers in thirteen different markets. Responses were obtained from thirty-three, of which thirty-one were able to be coded and used for analysis, a response rate of 50.76%. The response rate, although better than often received on mailed questionnaires still requires caution in interpretation of results.

The frequency of response tables are found in Appendix E.

Retailers were asked what products they supplied to the market. In the thirty-one responses, the most frequently supplied items are beets, cabbages, carrots, cauliflower and potatoes.

The large majority (73.3%) of the respondents produced all their own produce. Of the remaining 26.7%, 80% of these obtain additional supplies from a close farm, while the other 20% complete their product lines by any means available to them.

Booth Toothman[1] and Cobbledick[2] indicated that farmers' markets are most suited to the needs of the small farmer. Results from the respondents indicated that the majority cultivated from 0 - 3 acres for retailing at farmers' markets.

Production and retailing of the vegetables was a family venture for the respondents. This finding is supported by Smith and Cravens' research[3].

Over one-half of the retailers live within a 14-mile range of the market which they use for selling their produce, but almost 25% reside over 30 miles from the market. Alberta Agriculture[4] recommend the establishment of markets near the stallholders, but this author's findings indicate that some retailers are willing to go long distances to sell at a market.

From the 31 retailers, more than 70% spent 9 hours or less in

---

1 James Toothman. op.cit., p. 13.

2 Robert Cobbledick. op.cit., p. 2.

3 M.W. Smith & W.E. Cravens. op.cit.. p. 3.

4 Alberta Agriculture. "To the Management" [of Farmers' Markets] (date unknown). p. 14.

marketing. The majority of stallholders marketed once a week or less. This finding corresponds to Toothman's analysis[5].

Several retailers indicated problems in pricing their produce. Lois Hole at the third annual Alberta Farmers' Market Seminar suggested that sometimes small marketers had little concept of the costs involved in production and consequently sold their produce at too low a price. The Alberta Agriculture Bulletin was only used by 35.5% of the respondents. Several retailers indicated verbally to the author while at the market a lack of knowledge of this bulletin. Since pricing of vegetables historically is a problem, some further attempt could be made to assist retailers in pricing.

Retailers used a combination of methods to determine how much produce to bring to the market. The amount of produce available at the farm and the estimated sales were the most common factors used to determine the quantity required

Unless the retailer is able to estimate with accuracy, he may face the problem of unsold produce at the end of the market session. The retailers questioned used a variety of methods to dispose of the remaining produce. More than one-half the retailers questioned used the produce personally, whether immediately or by processing for later use.

Regular customers appear to be in the minority. Approximately one-half of the retailers indicate that their regular clientele accounts for less than 20% of sales. However, one-third of the retailers indicate that regular customers account for more than 40% of their business.

---

5 James Toothman. op.cit., p. 11.

The retailers were questioned as to why they used farmers' markets to sell their produce. The convenience of this form of marketing was the most important aspect to these retailers. Five stallholders indicated that their profit margin was increased using this form of marketing.

Three open-ended questions were designed to determine the retailers opinions of the markets. In each of these questions, more than one-third of the retailers had no comments. The reasons for this lack of response to these questions might be found in demographic data, but this was not obtained since originally it did not appear to be necessary for the analysis. Although informed of the nature of the study, the retailers may also have been apprehensive about the use of the information given. They may have been worried about jeopardizing their use of a stall at the market. Unfortunately, in markets where there were obvious problems (such as too few stallholders or a lack of customers), stallholders ventured no opinions. With the lack of response, valid generalizations are impossible for these questions.

Consumers

Demographic information was obtained on sex, age, education of wife and husband, occupation of respondent and spouse, income, number of children; and the distance travelled to the market, the number of visits made to the market and the products purchased at the market. The responses are shown as frequency and percentage distribution in Table #2. The majority of the respondents were women. The largest single percentage of shoppers was in the age range 25 - 35, accounting for more than one-third of the sample. Most respondents were high school graduates. Over one-third of the respondents were housewives and more

TABLE 2

Demographic Characteristics of the Survey Sample

A) Sex

	Frequency	Percent
Male	33	17.1
Female	160	82.9

B) Age Group

Category (Years)	Frequency	Percent
15 - 24	26	13.5
25 - 35	65	33.7
36 - 45	27	14.0
46 - 45	27	14.0
56 - 65	30	15.5
Over 65	17	8.8
No Answer	1	0.5

C) Education

Category	Female Head of Family		Male Head of Family	
	Frequency	Percent	Frequency	Percent
Less than high school	29	15.0	26	13.5
High School	71	36.8	44	22.8
Vocational, Technical	23	11.9	7	3.6
Apprentice	1	0.5	19	9.8
Some University	24	12.4	14	7.3
University	33	17.1	38	19.7
No Answer	8	4.1	22	11.4
Not Applicable	4	2.1	23	11.9

Table 2 - continued

D) Occupation

Category	Respondent		Spouse of Respondent	
	Frequency	Percent	Frequency	Percent
Professional and Managerial	42	21.8	56	29.0
Clerical	25	13.0	5	2.6
Sales and Service	23	11.9	23	11.9
Production, Construction or Transportation	9	4.7	29	15.0
Student/Trainee	7	3.6	2	1.0
Other	17	8.8	27	14.0
Not Employed Outside of Home	65	33.7	8	4.1
Not Applicable	0	0	26	13.5
No Answer	5	2.6	17	8.8

E) Family Income Groups

Category (dollars)	Frequency	Percentage	Statistics Canada Alberta Income 1975
Under 4,999	11	5.7	11.3
5,000 - 9,999	40	20.7	16.1
10,000 - 14,999	46	23.8	20.2
15,000 - 19,999	28	14.5	21.1
20,000 - 24,999	23	11.9	13.4
25,000 or more	26	13.5	18.1
No Answer	19	9.8	

Table 2 - continued

F) Ages of Children

Categories (age in years)	Number	Frequency	Percent
0 - 4	0	136	70.5
	1	44	22.8
	2	12	6.2
	3	1	0.5
5 - 9	0	160	82.9
	1	21	10.9
	2	12	6.2
10 - 14	0	155	80.3
	1	22	11.4
	2	14	7.3
	3	2	1.0
15 - 18	0	172	89.1
	1	14	7.3
	2	6	3.1
	3	1	0.5

G) Family Sizes

Number of Persons	Frequency	Percent
1	33	17.1
2	60	31.1
3	46	23.8
4	29	15.0
5	15	7.8
6	5	2.6
7	3	1.5
over 7	2	1.0

TABLE 3

Use of the Market by Survey Respondents

A) Distance Travelled to the Market by Survey Respondents

Category (miles)	Frequency	Percent
0 - 4	130	67.4
5 - 9	28	14.5
10 - 14	10	5.2
15 - 19	4	2.1
Over 20	17	8.8
No Answer	4	2.1

B) Number of Visits Made Annually to Farmers' Markets by Survey Respondents

Category	Frequency	Percent
More than 25	31	16.1
12 - 24	32	16.6
4 - 12	81	42.0
2 - 3	25	13.0
Once	24	12.4

C) Amount of Shopping Done at Farmers' Markets by Survey Respondents

Category (Percent of total grocery shopping)	Frequency	Percent
0 - 10	137	71.0
11 - 20	25	13.0
21 - 30	11	5.7
31-40	1	0.5
41-50	4	2.1
Over 50	1	0.5
No Answer	14	7.3

TABLE 4

FREQUENCY AND PERCENTAGE DISTRIBUTION OF SHOPPING HABITS

CATEGORY	FREQUENCY
Shop Alone	60 (31.1)
Shop With Spouse	48 (24.9)
Shop With Children	8 (4.1)
Shop With Family	20 (10.4)
Shop With Neighbours	5 (2.6)
Shop With Friend	9 (4.7)
Shop With Relative	15 (7.8)
Shop With Others	28 (14.5)
	193

than one-fifth were professionally employed. Income levels of respondents ranged from low to high with no one income group contributing outstandingly to the total. Twenty-nine percent of the respondents had one or more children aged 0-4; 17% had one or more children aged 5-9; 19% had one or more children aged 10-14 and 11% had children aged 15-18. Over two-thirds of the respondents lived within four miles of the markets. Three-quarters of respondents visited the market more than three times annually. The only produce purchased by more than half the consumers was potatoes, while carrots and tomatoes were in demand by greater than 40% of consumers.

Use of the Market by Consumers

Additional data was obtained on the respondents' shopping habits, thier likes and dislikes of the market and their reasons for using the market. Only 31% of the respondents shopped alone. Almost 25% of respondents shop with their spouse, while only 4% shop with their children. A family group outing accounts for 10% of the shoppers.

Almost 60% of shoppers indicated that they liked shopping at the farmers' markets because of the fresh produce. Only about 28% of the shoppers indicated they liked the atmosphere and social aspect of the market. Dislikes of the market were minimal. Over 49% of the respondents left this question unanswered. The most common answer which came from only 9% of the respondents was a dislike of the crowds at the market.

Reasons for using the market were allied with likes of the market. Again, fresh produce was the most common response.

Opinions of the Market by Consumers

The responses obtained in the semantic differential are shown in Table #6. The consumers responded most positively to farmers' markets. Freshness and quality were rated positively by all respondents. Very few respondents had negative opinions of anything concerning the market with the exception of highway markers. Here 46.1% felt that the signs were inadequate. Locations and hours of operation of the markets surveyed were satisfactory for most consumers. Parking facilities were considered adequate. (A breakdown of individual markets would indicate more positively where parking was inadequate. All 17 persons strongly negative about parking adequacy were surveyed at Edmonton City Market.) The service offered by the stallholders was positively valued by consumers. 65.3% of consumers considered that the market offered a wide variety of items. Prices were considered reasonable by 75.6% of respondents. Market appearance, displays and odours were also positively rated by consumers. Foods were generally considered to be natural with few or no contaminants or additives.

The median categories for the semantic differential are shown in Figure #3. The scores reflect the high positive opinion that consumers have of the market.

TABLE 5

Likes, Dislikes and Use of Farmers' Markets by Survey Respondents

A) Likes of the Market

Category	Frequency	Percent
Social Aspects	15	7.8
Atmosphere	29	15.0
Fresh Products	114	59.1
Quality of Produce	9	4.7
Price	27	14.0
Variety	31	16.1
Enjoyment	9	4.7
Meet with Producer	9	4.7
Location	2	1.0
Convenient	3	1.5
Other	12	6.2
No Answer	14	7.3

B) Dislikes of the Market

Price	5	2.6
Time Open	8	4.1
Location	15	7.8
Inconsistent Supply	1	0.5
Limited Supply	10	5.2
Lack of Variety	7	3.6
'Junk' Stands	7	3.6
Parking	8	4.1
Prices Not Marked	2	1.0
Crowded	18	9.3
Size	2	1.0
No Dislikes	15	7.8
Other	10	5.2
No Answer	96	49.7

C) Reasons for Using the Market

Social Aspects	19	9.8
Atmosphere	12	6.2
Fresh Produce	76	39.4
Quality	14	7.3
Price	31	16.1
Variety	21	10.9
Enjoyment	21	10.9
Meet with Producer	25	12.9
Location	4	2.1
Convenience	16	8.3
Other	13	6.7
No Answer	23	11.9

TABLE 6

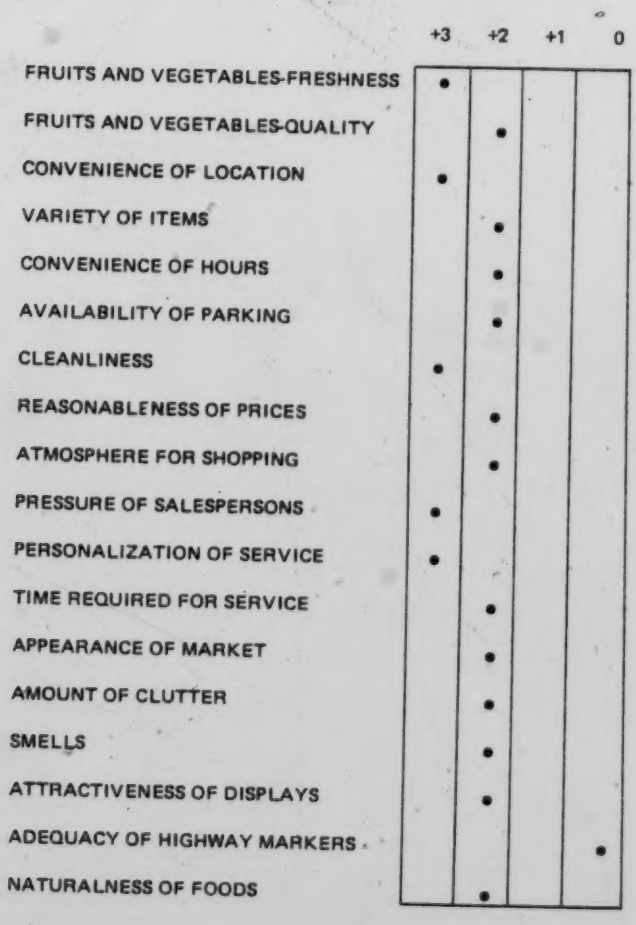
CONSUMER ASSESSMENTS OF FARMERS' MARKETS

(Frequencies and Percentages of Respondents to Semantic Differential)

Descriptive Phrase	+3	+2	+1	0	-1	-2	-3	Descriptive Phrase
Fruits and Vegetables are Fresh	116 (60.1)	49 (25.4)	10 (5.2)	4 (2.1)				Fruits and Vegetables Lack Freshness
Good Quality Fruits and Vegetables	93 (48.2)	56 (29.0)	21 (10.9)	6 (3.1)				Poor Quality Fruits and Vegetables
Convenient Location	112 (58.0)	28 (14.5)	12 (6.2)	10 (5.2)	4 (2.1)	7 (3.6)	7 (3.6)	Inconvenient Location
Wide Variety of Items	75 (38.9)	28 (14.5)	23 (11.9)	22 (11.4)	14 (7.3)	10 (5.2)	6 (3.1)	Less Variety of Items
Convenient Hours	86 (44.6)	32 (16.6)	14 (7.3)	21 (10.9)	11 (5.7)	10 (5.2)	8 (4.1)	Limited Hours
More Parking Space	78 (40.4)	19 (9.8)	17 (8.8)	28 (14.5)	6 (3.1)	6 (3.1)	17 (8.8)	Less Parking Space
Clean	104 (53.9)	32 (16.6)	28 (14.5)	9 (4.7	4 (2.1)	3 (1.6)	1 (0.5)	Less Clean
Reasonable Prices	72 (37.3)	41 (21.2)	33 (17.1)	18 (9.3)	7 (3.6)	5 (2.6)	5 (2.6)	High Prices
Nice Atmosphere for Shopping	95 (49.2)	30 (15.5)	21 (10.9)	19 (9.8)	8 (4.1)	3 (1.6)	4 (2.1)	Not a Nice Atmosphere for Shopping
The Consumer is Not Pressured to Buy	136 (70.5)	27 (14.0)	6 (3.1)	5 (2.6)	2 (1.0)	2 (1.0)	2 (1.0)	The Consumer is Pressured to Buy
Personal Service	104 (53.9)	33 (17.1)	23 (11.9)	15 (7.8)	3 (1.6)	0 (0)	1 (0.5)	Impersonal Service
Tpkes Little Time to Get Waited On	96 (49.7)	41 (21.2)	19 (9.8)	18 (9.3)	2 (1.0)	2 (1.0)	2 (1.0)	Takes Longer to Get Waited On
Like Appearance of Market	78 (40.4)	38 (19.7)	34 (17.6)	16 (8.3)	7 (3.6)	4 (2.1)	3 (1.6)	Don't Like Appearance of Market
Roomy	91 (47.2)	22 (11.4)	19 (9.8)	14 (7.3)	7 (3.6)	13 (6.7)	15 (7.8)	Crowded (Cluttered)
Smells Good	96 (49.7)	36 (18.7)	21 (10.9)	14 (7.3)	9 (4.7)	1 (0.5)	2 (1.0)	Smells Bad
Attractive Displays	80 (41.5)	30 (15.5)	27 (14.0)	27 (14.0)	10 (5.2)	2 (1.0)	4 (2.1)	Unattractive Displays
Adequate Highway Signs for Market	29 (15.0)	10 (5.2)	20 (10.4)	18 (9.3)	13 (6.7)	17 (8.8)	59 (30.6)	Inadequate Highway Signs for Market
More Natural Foods	85 (44.0)	39 (20.2)	21 (10.9)	21 (10.9)	3 (1.6)	3 (1.6)	6 (3.1)	Not as Natural Foods

FIGURE 3

MEDIAN CATEGORIES FOR SEMANTIC DIFFERENTIAL



Chi-Square Analysis of sex, occupation and shopping habits with market use

The chi-square analysis of the nominal variables, that is the occupation of the respondent, the occupation of the spouse and the shopping habits (i.e., does the respondent shop alone or with others) revealed little association between market use variables. (Table #7, 8 & 9). Professionally employed respondents tended to make fewer annual visits to the market, while those employed in sales, service, transportation, construction and production visited more frequently. Persons over age 45 were more likely to shop alone than were younger people, but their use and opinions of the market was not significantly different from those who shopped with others.

Kendall's Tau

The correlation of variables was assessed using Kendall's tau on the original data. , The researcher first examined the effect of the demographic variables with the shopping patterns at the market (Table #10). Age was found to be negatively correlated at the .001 level with the number of visits made to the market. However, the number of annual visits was coded inversely which means that older shoppers tend to attend farmers' markets more frequently. High education of both husband and wife shows an inverse correlation with the number of annual visits to farmers' markets. Since higher education and professional status are often directly related, this finding tends to help confirm the chi-square analysis. However, higher education of the husband and higher income levels are positively correlated with the distance shoppers are willing to travel to the market at a .05 level. It is apparent, however, from the analysis that the greater the distance to be travelled, the fewer visits are made to the market.

This researcher had hypothesized that the presence of young children

TABLE 7

Chi-square analysis of sex of respondent with distance travelled to market, number of visits, amount purchased at the market, shopping habits and semantic differential.

Category	Respondent's Sex Degree of Freedom	Chi-square Score
Distance travelled to Market	2	2.15272
Number of Annual Visits to Market	1	.73134
Amount Purchased at Market	2	---
Shopping Habits	2	1.81236
Semantic Differential #		
Wide Variety	2	2.27224
Convenience of Hours	2	1.80528
Convenience of Parking	2	.09436
Amount of Clutter	2	3.67313
Adequate Highway Markers	2	3.56375

Only categories in the semantic differential with sufficient range of response to allow cell frequencies of 5 or greater are reported.

TABLE 8

Chi-square analysis of respondent's occupation and spouse's occupation with distance travelled to market, number of visits, amount purchased at the market and shopping habits.+

Category	Respondent's Occupation		Spouse's Occupation	
	Degrees of Freedom	Chi-square Score	Degrees of Freedom	Chi-square Score
Distance Travelled to Market	4	4.9016	4	---
Number of Annual Visits to Market	4	10.61904***	4	---
Amount Purchased at Market	8	6.54811	8	8.49845
Shopping Habits	4	4.82286	4	3.38332

*** Significant at .05

+ The chi-square analysis does not include the semantic differential. The highly positive opinions of consumers makes chi-square unreliable since the negative cells have too few responses.

TABLE 9

Chi-Square Analysis of Shopping Habits with Sex, Age, Number of Visits, Amount Purchased at Market and Semantic Differential Scale

Category	Degrees of Freedom	Chi-Square Value
Sex	1	1.81236
Age	1	14.432*
Number of Visits	1	1.64522
Amount Purchased at Market	2	.38289
Fruits and Vegetables - Freshness	2	---
Fruits and Vegetables - Quality	2	---
Convenience of Location	2	---
Variety of Items	2	.21786
Convenience of Hours	2	1.34972
Parking Availability	2	4.68552
Cleanliness	2	---
Reasonableness of Prices	2	.09666
Atmosphere for Shopping	2	.20594
Pressure of Salespersons	2	---
Personalization of Service	2	---
Time Required for Service	2	---
Appearance of Market	2	---
Amount of Clutter	2	3.99826
Smells	2	.77971
Attractiveness of Displays	2	.31060
Adequacy of Highway Markers	2	1.83596
Naturalness of Foods	2	---

* Significant at .001

in a family would tend to limit the use of the market. From the correlation analysis, this was not found to be the case. Indeed, the analysis indicates that the presence of children, ages 5-9 tends to increase the number of visits to the market.

People who used the market with some regularity purchased a larger percentage of their groceries at the market than did the more casual user.

Correlation of Variables Within the Semantic Differential

The degree of correlation of the variables within the semantic differential scale was extremely high. Of the 153 associations made, only 17 did not have correlation at the .05 level of significance or less. Of the 17 unrelated items, 11 of these were concerned with parking adequacy and 5 with the adequacy of highway markers. There were no significant correlations between the naturalness of foods at the market and the atmosphere of the market. This high degree of correlation could result from two factors: either the semantic differential scale was really only testing one opinion or the very high positive regard the consumer has for the market rendered this correlation analysis quite meaningless. The combination of the two factors could also be a significant factor in this correlation analysis.

Correlation of Demographic and Information Variables with the Semantic Differential

Of the 126 correlations tested, 65 were significant at least at the .05 level. Age caused differences in the opinion scores. Older shoppers rated the market much more favourably in freshness and quality of the produce, convenience of the location and hours, the variety of

TABLE 10

CORRELATION OF VARIABLES WITH SHOPPING PATTERNS AT FARMER'S MARKETS

	Distance Travelled to the Market	Number of Annual Visits to Farmer's Markets	Percentage of Shopping Done at Farmer's Markets
AGE	-.0143	-.1956*	.0153
EDUCATION OF WIFE	.0635	.1212***	.1021
EDUCATION OF HUSBAND	.1164***	.1227***	.0369
INCOME	.1482***	.0619	-.0178
WITH CHILDREN AGES 0 - 4	-.0028	-.0666	.0821
WITH CHILDREN AGES 5 - 9	-.2335	-.3855**	.1976
WITH CHILDREN AGES 10 - 14	-.2315	.1051	.1498
WITH CHILDREN AGES 15 - 19	.1017	.1097	-.3578
DISTANCE TRAVELLED TO THE MARKET		.1404***	-.1124
NUMBER OF ANNUAL VISITS TO FARMER'S MARKETS			-.2578*
PERCENTAGE OF SHOPPING DONE AT FARMER'S MARKETS			

* Significance at .001
** Significance at .01
*** Significance at .05

CORRELATION OF VARIABLES IN SEMANTIC DIFFERENTIAL TABLE 11

	Fruits and Vegetables Freshness	Fruits and Vegetables Quality	Convenience of Location	Variety of Items	Convenience of Hours	Parking Availability	Cleanliness
FRUITS AND VEGETABLES - FRESHNESS							
FRUITS AND VEGETABLES - QUALITY	.6263*						
CONVENIENCE OF LOCATION	.2341*	.1623**					
VARIETY OF ITEMS	.2749*	.2912*	.1750**				
CONVENIENCE OF HOURS	.3337*	.3214*	.3307*	.4694*			
AVAILABILITY OF PARKING	.0412	.0542	.0293	.0733	.0910		
CLEANLINESS	.0274*	.2935*	.2626*	.2942*	.4150*	.1674**	
REASONABLENESS OF PRICES	.1995*	.2664*	.1397***	.1089***	.1591**	.1480**	.3643*
ATMOSPHERE FOR SHOPPING	.2850*	.2932*	.3691*	.3082*	.3397*	.0998*	.4985*
PRESSURE OF SALESPERSON	.2654*	.2455*	.2461*	.2498*	.2484*	.2377*	.3615*
PERSONALIZATION OF SERVICE	.2653*	.2593*	.2652*	.2375*	.2405*	.1203***	.4654*
TIME REQUIRED FOR SERVICE	.2571*	.1863**	.2152*	.1201***	.1774**	.1374***	.2755*
APPEARANCE OF MARKET	.2403*	.2485*	.1483**	.3461*	.3548*	.0822	.4148*
AMOUNT OF CLUTTER	.2122*	.1886**	.2405*	.1968*	.2810*	.2059*	.3485*
SMELLS	.2976*	.2843*	.1951*	.2870*	.2724*	.0788	.4066*
ATTRACTIVENESS OF DISPLAYS	.3343*	.3346*	.1616**	.3871*	.3598*	.1015	.3928*
ADEQUACY OF HIGHWAY MARKERS	.0522	.0868	.0858	.1251***	.2742*	.0817	.1549**
NATURALNESS OF FOODS	.1939**	.1248***	.2465*	.1925*	.2560*	.0198	.2110*

CORRELATION OF VARIABLES WITH SEMANTIC DIFFERENTIAL TABLE 12

	Fruits and Vegetables Freshness	Fruits and Vegetables Quality	Convenience of Location	Variety of Items	Convenience of Hours	Parking Availability	Cleanliness
AGE	-.2035*	-.1245**	-.1381**	-.2142*	-.2164*	-.0279	-.2940*
EDUCATION OF WIFE	.1410***	.0924	.0869	.0448	.1960*	-.0458	.1353***
EDUCATION OF HUSBAND	.1958**	.0234	.1349***	.1678***	.1221***	.0672	.2134*
INCOME	.0469	-.0304	.0895	.0992	.1212***	-.0632	.1460***
DISTANCE TRAVELLED	.0816	.1166***	.2051*	.0433	.0658	.0211	.0221
NUMBER OF VISITS	.2059*	.1333**	.2454*	.0704	.2600*	-.0626	.2838*
AMOUNT PURCHASED AT MARKET	-.1121	-.2061**	-.0451	-.1589**	-.0637	-.0689	-.0315

* Significance at .001

** Significance at .01

*** Significance at .05

Reasonableness of Prices	Atmosphere for Shopping	Pressure of Salespersons	Personalization of Service	Time Required for Service	Appearance of Market	Amount of Clutter	Smells	Attractiveness of Displays	Adequacy of Highway Markers	Naturalness of Foods
.2158*										
.2537*	.4149*									
.2627*	.4092*	.4228*								
.2662*	.2505*	.3899*	.5490*							
.2175*	.5210*	.2788*	.3937*	.3482*						
.2103*	.5061*	.3236*	.3447*	.3059*	.4642*					
.2097*	.4481*	.4076*	.4212*	.3242*	.5564*	.4622*				
.1323***	.4875*	.2850*	.3753*	.2556*	.6624*	.3791*	.5654*			
.1510**	.1823**	.0372	.0229	.1088***	.2259*	.1367***	.1129***	.2338*		
.1752**	.2837	.2166*	.3931*	.3282*	.3328*	.3456*	.3353*	.3274*	.1123***	

Reasonableness of Prices	Atmosphere for Shopping	Pressure of Salespersons	Personalization of Service	Time Required for Service	Appearance of Market	Amount of Clutter	Smells	Attractiveness of Displays	Adequacy of Highway Markers	Naturalness of Foods
-.0044	-.2475*	-.1583**	-.2237*	-.1967*	-.2834*	-.1472**	-.2582*	-.2541*	-.0265	-.1042***
-.0175	.1318***	.0566	.0862	.0856	.1819**	.1278***	.1598**	.1643**	.0522	.1211***
.0234	.1349***	.1678***	.1221***	.0672	.2134*	.1415***	.2609*	.2209*	.0819	.0726
.0584	.2354*	.1067	.0702	.0497	.2133*	.1925*	.2414*	.0932	.0477	.1153***
-.0002	.1731**	-.0248	-.0107	.0027	.0570	.1444**	.0668	.1142***	.1154**	.1190***
.0072	.2385*	.1489**	.2111*	.0956	.0531	.1484**	.2575*	.1600**	.0651	.0924
-.1023	-.1600**	-.0599	-.0821	.0202	-.0377	-.0272	-.0469	-.0452	-.0972	.1370***

items sold, the cleanliness, appearance, lack of clutter, pleasant odours, and attractiveness of the displays. They also rated the atmosphere of the market more positively than younger shoppers. The personalized service and the short time required for service was significantly more positive for older shoppers than for younger shoppers.

Higher education levels of husbands and wives correlated negatively with their opinions of the market. Freshness of produce, although still considered positive, was not as highly rated for the higher educated male and female. Males with higher education considered the location and hours to be less convenient. Higher educated females concurred with the inconvenience of hours. Males with higher education levels also considered the variety of items available at the market to be poorer. Cleanliness, appearance of the market, the amount of clutter, the odours and the attractiveness of displays were all found to be rated significantly lower by both males and females of higher education levels. The atmosphere of the market was not as positive for higher education levels as it was for those of lower education. Females with higher education levels rated the naturalness of the foods less positively.

Income also had some correlation with opinions of the market. Higher income shoppers were less positive about the convenience of the hours that the markets were open. Higher income shoppers rated the cleanliness, appearance of the market, the amount of clutter and the odours less favourably than lower income shoppers and the food was not considered as natural.

The greater the distance travelled the less positively shoppers rated the quality of the vegetables, the convenience of the location,

the atmosphere for shopping, the amount of clutter, the attractiveness of the displays and the naturalness of the foods. The greater the distance travelled, the more negatively shoppers considered the adequacy of the highway signs for the markets.

The more visits shoppers made to farmers' markets, the more positively they viewed the market. They particularly seemed to like the freshness of the vegetables, the convenience of the market, the atmosphere and the personalized service. Shoppers who visit the markets more frequently also enjoy the quality of the vegetables, the attractive displays and the lack of pressure to make purchases.

The consumers who buy more at the market are more positive about the quality of the produce, the variety of items, the atmosphere for shopping and the naturalness of the foods.

Chi-square Analysis of High Self-Actualizers and Low Self-Actualizers with Demographic Characteristics and Opinions

The chi-square analysis of high self-actualizers and low self-actualizers failed to reveal significant differences between the two in either their demographic characteristics or their opinions of the market. An exception was the education level of the husband. The male head of families of high self-actualizers had higher education levels than did the male head of families of low self-actualizers.

Even with collapsing of the categories, many of the items on the semantic differential scale had so few responses in the negative cells that chi-square analysis was not possible.

TABLE 13

Chi-Square Analysis of High Self-Actualizers and Low Self Actualizers

Category	Degrees of Freedom	Chi-Square Value
Sex	1	.61538
Age	1	3.53
Education - Wife	3	2.42
Education - Husband	3	6.05***
Respondent's Occupation	4	3.82
Spouse's Occupation	4	---
Income	4	6.03
Distance Travelled	4	---
Number of Visits	4	1.90897
Amount Purchased at Market	2	1.6000
Shopping Habits	1	.18
Fruits and Vegetables - Freshness	2	---
Fruits and Vegetables - Quality	2	---
Convenient Location	2	---
Wide Variety	2	1.54
Convenient Hours	2	.91
Parking Adequacy	2	1.82
Cleanliness	2	---
Reasonableness of Prices	2	---
Atmosphere for Shopping	2	1.88
Pressure of Salespersons	2	---
Personalization of Service	2	---
Time Required for Service	2	---
Appearance of Market	2	---
Amount of Clutter	2	5.28
Smells	2	---
Attractiveness of Displays	2	.74
Adequacy of Highway Markers	2	.15
Naturalness of Foods	2	---

*** Significant at .05

Chapter 6 Discussion

The fresh vegetable industry in Alberta is a small industry, but with a potential for growth. In 1972, Alberta Agriculture expanded the Alberta Agricultural Products Marketing Council and authorized the Council to undertake an examination of vegetable and potato marketing in Alberta. A minor recommendation of the Council made to encourage vegetable production was the establishment of more farmers' markets. Since then, farmers' markets have prospered and expanded rapidly. The growth of these markets has occurred with little formalized research on either market management, retail or consumer practices.

This research has examined the market management and retail practices of farmers' markets in Alberta, attempting to give some illumination to the research questions:

(1) What constitutes a farmers' market in Alberta;

(2) What is needed to establish a market;

(3) What does the stallholder need;

(4) Why does a stallholder select a farmers' market to sell his produce?

The main thrust of the research, however, concerned the consumer and attempted to determine who the consumer is, who utilizes farmers' markets, and why the consumer has responded so positively to farmers' markets.

MARKET MANAGEMENT

There does not appear to be a consensus among the market managers in Alberta as to what constitutes a farmers' market. Restrictions as to who can sell at the market vary considerably, from no restrictions, to a restriction which only allows for vendor-grown or vendor-made

produce and products to be sold. All markets do offer a full selection of vegetables and most also have eggs, handicrafts, home baking and honey for sale. Even the size of the market presently varies from two stalls to as many as seventy-five. All of the markets operate several times per year, but many have only irregular days of operation. From the results of this survey, the minimum definition of a market in Alberta that encompasses all markets operating under the auspices of Alberta Agriculture is: two or more retailers who join together two or more times annually to sell farm produce from a single location.

In some markets the proliferation of "junk" stands, particularly in early season when vegetable selection is low, causes the farmers' market to resemble a flea market.

Alberta farmers' markets appear to have been established without careful analysis of what is needed to establish a market. In several areas, there is dissention between the farmers' market and the Chamber of Commerce over the very existence of the market. This creates problems in visibility of the market. Finding the location of markets in these areas is problematic and discourages the consumer.

Several markets have been established without careful consideration of the willingness of producers to participate in the market. Therefore, some markets are operating which barely meet the minimal definition.

The description of the position of market manager is loosely defined. Many of the managers are extremely active, encouraging participation, advertising, display techniques and promotion ideas, while others are only concerned with collecting of rental fees.

Recommendations

1. A minimal size for farmers' markets should be established. Consumers need to be assured that when they take time to travel to a market, they are going to find more than two retailers offering a minimal selection of farm produce.

2. There should be restrictions on stalls that are not selling farm produce to reduce the number of "junk" stands. These restrictions could be done either by limiting the ratio of non-agricultural stands to agricultural stands or by imposing regulations that items must be vendor made.

3. The concept of market managers' seminars as sponsored by Alberta Agriculture are excellent as an exchange of ideas between the managers, but could be broadened to include visits to active successful markets in Alberta. A newsletter giving suggestions of successful promotions and advertising ideas distributed among the managers several times annually could also help in ongoing training of managers.

Conclusions

More research is required to give a more definitive answer to the questions - what is needed to establish a market? This must be done if farmers' markets are to continue to flourish. The few poor markets that presently exist discourage the consumer and may eventually affect the attendance at the better markets.

STALLHOLDERS

The stallholder selling at most farmers' markets in Alberta farms 0 to 3 acres for the produce sold at the markets. For very large markets such as Edmonton City and Red Deer, the cultivated acreages for vegetable sales is higher.

Needs of the stallholder were only cursorily examined. However, the area of pricing, which has contributed to problems in fresh vegetable marketing in Alberta as a whole, remains problematic in farmers' markets. The consumer indicated a desire to purchase potatoes, carrots, tomatoes and eggs in the greatest abundance. Producers are supplying beets, cabbages, carrots cauliflowers and potatoes in the greatest abundance.

The respondents to the retailer's questionnaire were vague in their reasons for using a farmers' market to sell their produce. The convenience of the market and the opportunity to make a profit were the most common responses.

Recommendations

1. More encouragement in the use of the Alberta Agriculture Pricing Bulletin to the market managers may alleviate some of the pricing problems.

2. Some assistance in determining the amount of produce to bring to the market would help the retailer who has the problems with unsold produce and the consumer who finds the limited supply to be irritating. Some resolution of the supply of produce with the consumer demand would alleviate both unsold produce and frustrated purchasers.

Conclusions

Lloyd Hausher, Market Garden Extension Specialist, Alberta Agriculture, reported on stallholder needs and concerns to the Third Annual Alberta Farmers' Market Managers Seminar. From his report, it is obvious that the stallholders have many more needs which were not identified in this research. More investigation needs to be done in this area.

More research is also needed to clarify the use of farmers' markets by retailers.

CONSUMERS

The research was an attempt to answer the questions - who is the consumer who uses the farmers' market and why has the consumer responded positively to the farmers' market?

Description of the Consumer

Females were the predominant shoppers at farmers' markets. McFadyen[1] found that males comprise 12.1% of food buyers in Edmonton and concluded that their role was small but significant.

---

1 Sheila McFadyen. op.cit., p. 10

The largest single age category for shoppers was between the ages of 26-35 which accounted for over one-third of the respondents. A direct comparison with Statistics Canada is not possible since the categories are not the same, but it would appear that this age group is over-represented in this study.

Education levels for shoppers indicate that most shoppers have some form of education beyond high school, although the largest single category of shoppers are high-school graduates. A comparison of both the levels of education and occupation with Statistics Canada is not possible since the parameters that are used by Statistics Canada cannot be compared with the format used in this study.

The last available Statistics Canada family income data was based on 1975 income. This figure indicated under representation of the families with incomes under $9,999. The income question caused resentment by about 10% of the sample. When Statistics Canada 1976 figures are released, it may indicate where some categories can be collapsed without losing meaningful data.

The household size was generally small with almost one-half of the respondents coming from households of two or fewer members. It is not possible to comment on this without having a more recent census distribution.

Two-thirds of farmers' market users live within four miles of the market. Almost one-quarter of the shoppers used the market less than three times annually. For the large majority of shoppers, farmers' market purchases account for less than 10% of their total grocery shopping.

Only 31% of the shoppers shopped alone at the market. The Canadian Grocer indicated that 33 to 56% of Canadian shoppers shop alone.[2]

Reasons for Using the Market

The freshness of produce was the most popular reason for using the market. Consumers also indicated that they enjoyed meeting the producer. Competitive prices were cited by 16% of consumers as a reason for using the market.

Opinions of the Market

Open-ended questions were used to obtain knowledge of the consumers' likes and dislikes of farmers' markets. The freshness of the produce was the most popular reason given for liking the market. Social aspects, atmosphere, meeting with the producer and enjoyment received limited responses from the consumer.

Over half the consumers had no dislikes of the market. Almost 40% of consumers did, however, indicate some dislike. Market location and large crowds were the most common responses.

The opinions of consumers was also measured by the semantic differential scale. The consumers responded most favourably to all aspects of farmers' markets with the exception of adequate highway signs. Freshness of fruits and vegetables was highly valued and corresponds to the consumers' reasons for liking and using the market. Personal service and the lack of pressure to make purchases were not given as reasons by consumers for either liking or using the market, but these

---

2 Anonymous, Canadian Grocer, May, 1972, quoted in Sheila McFadyen, ibid. p. 23.

aspects were highly regarded by consumers. The convenience of location was also highly regarded. Since the large majority of shoppers live within a four-mile radius, this would appear to contribute to the high rating for convenience. Cleanliness was the other very high rating of consumers. Market management appears to be meeting consumer needs in this area.

Self-Actualizing Consumer

The self-actualizing consumer is not more likely to shop at farmers' markets according to the results of this study. Although it would be convenient for the reseacher to ascribe this to the poor quality of the consumer self-actualizing test, the response to the likes and uses of farmers' markets was so highly related to the freshness of produce that it appears likely that the meeting of "Being" needs is not the dominant reason for using the market. Consumers can get many vegetables at supermarkets but they cannot get the same variety nor can they get the same freshness. This would appear to be the motivating force behind the use of farmers' markets.

Correlations of Variables

Occupation of either the respondent or the spouse of the respondent had little effect on the use of farmers' markets, although the spouse's professional occupation did tend to influence the number of visits made annually. Whether a person shopped alone or with others had no significant effect on their use of farmers' markets. Older persons were more likely to shop alone but this did not alter their opinions of or their use of the market. Older shoppers did tend to visit the farmers' market more often, while higher education both of respondent and spouse, tended

to limit the number of visits. Consumers with higher income levels were willing to travel further to reach the market, but income had no effect on the number of visits made or the percentage of shopping done at the market. Families with children ages 5 to 9 made more annual visits to the market, but otherwise the presence of children in the home had no effect on the use of the market. People who lived closer to the market visited the market more frequently. More frequent visits also encouraged the percentage of shopping done at the market.

Older shoppers had a more positive opinion of the market than did younger shoppers. This could perhaps be the result of nostalgia for their earlier lives. Ethnic origin was not determined in the research, but this could also have some influence on the more positive opinions, since people of other ethnic origins may be accustomed to farmers' markets in their past.

Persons of higher education were more negative in their opinions of the market. Similarly, consumers having higher income levels were more critical. This result was contrary to expectations.

The distance travelled to the market had direct correlations with the opinions of the market. People who travelled long distances were more critical in their opinion. The more visits a consumer made to the market and the more he purchased at the market, the more favourable he was of the market.

The high degree of correlation of variables within the semantic differential made it difficult to determine whether only one opinion was in fact being tested or whether the very high positive regard that the consumer has for the market rendered this correlation analysis quite meaningless. Although several statements such as appearance of the market,

cleanliness and amount of clutter are obviously related, such concepts as adequacy of highway markers and variety of items do not appear to have direct correlations. It would appear that a combination of the two factors are the significant cause of high correlation.

Framework

Maslow's theory of Hierarchy of Needs predicted that the consumer would be using the market to help meet the "being" needs. That is, the consumer would be interested in the interpersonal transactions that are possible with the sales help and other consumers at the market. The use of the market would be seen as a way of helping the individual farmer, a way of expressing concern over environmental problems such as overpackaging, and a place where the atmosphere was friendly and relaxed.

Use of Maslow's theory would predict that the consumer would be older, since self-actualization is only reached as more maturity is obtained. The consumer should have attained higher levels of education, since self-actualizing people strive to fulfill their potential. Higher income is usually correlated with higher education. In this study, education and income had a correlation probability of .001. Consequently, it could be predicted from the framework that the consumer at the market would have a higher income level.

In the analysis of the data, it was determined that the meeting of "being" needs was not important to the consumer. Freshness of produce, rather than social aspects, atmosphere, meeting with the producer and enjoyment was the predominant reason why consumers both used and liked the market. Personal service was considered important for meeting "being" needs and this was not verbalized by consumers, although it did rate highly on the semantic differential scale.

The fact that older shoppers were indeed more positive about the market than younger shoppers cannot be attributed to any Maslowvian premise in view of the lack of acceptance of other predictions and the lack of significant age differentials of high and low self-actualizers. Higher levels of education and income did not dispose the consumer to be more positive but, in fact, were related with more negative opinions.

The results of the data analysis did not lend empirical evidence to the hypothesis that shoppers at farmers' markets will be working toward meeting "being" needs. The data revealed that high self-actualizers had shopping patterns very similar to those of low or non self-actualizers. This result could be due to the inadequacy of the consumer self-actualizing test or it could be the choice of an inappropriate framework. The reasons given by consumers for liking and using a farmers' market tends to lend credence to the latter limitation.

Recommendations

1. Since two-thirds of farmers' market users live within four miles of the market, this fact must be taken into consideration when planning new markets. The radius of four miles must include enough consumers to give the market viability.

2. One-quarter of shoppers use the market less than once a year. Perhaps the novelty aspect of market shopping could be used in advertising to bring in the casual shopper.

3. Farmers' market purchases account for only a small amount of groceries bought by the consumer. For people to continue a special trip to purchase only a small amount, the freshness of the vegetables must be maintained at a high level since this appears to be the main reason shoppers like and use the farmers' markets.

4. The sales help as much as possible should be the producer and his family since the consumer also expresses this as a reason for using the market.

5. Prices must remain competitive with other retail outlets or many consumers will not continue to exert the effort to use the market.

6. Dislikes of the market are minimal, but again considering the small amount of shopping done here, the dislikes must be kept at a low level or people will not continue to make the effort to attend the market. Perhaps each market should make an annual survey of the market to determine the consumer likes and dislikes.

7. Further uses of the Consumer Self-Actualizing Test without major revisions is not recommended.

Conclusions

It appears that consumers who shop at farmers' markets are not there to meet "being" needs. Consumers are using the market primarily for freshness of produce and are quite satisfied with the present operations. However, it should be noted that the amount of groceries purchased at farmers' markets is low and visits are generally infrequent. It appears then that consumers consider a visit to the market as a social outing. Promotion of farmers' markets would then capitalize on this, indicating not only the freshness of the produce, but also the unique aspects of the market.

Chapter 7 Limitations of the Study

The study was conducted in three parts, the market management, the stallholder and the consumer. Limitations were found in all areas, but as in the entire project, this researcher's interest focused mainly on the consumer and the limitations in this area are more developed.

Market Management

The brief look at market management was on a purely descriptive basis to obtain factual information regarding all of Alberta's markets. For the purpose of describing the markets as they presently exist in Alberta, the approach was adequate.

Stallholders

Again, the questionnaire for the stallholders was purely descriptive. The questionnaire was presented to the stallholder on the day of the market at a time when he was very busy. Further insights may have been gained if the stallholder had been questioned personally on a non-market day. The low response rate meant that many retailers did not complete the questionnaires and the lack of information on non-respondents limits the validity of this research.

Consumer

There are ten limiting factors in the consumer area of this research. Some of these have been discussed earlier and will be mentioned only briefly.

1. The education scale omitted one word at the end of the first category where many responses may have fallen. Several consumers became confused by the lack of the word "graduation" or "completion" for the phrase "less than high school". This did not come to the attention of the researcher until several markets had been surveyed. Consequently, the wording remained the same, since it was felt that a change at that time was too late to rectify the problem and indeed might further skew results.

2. The income question caused some hostility. Many consumers seemed to feel that this was an invasion of their privacy. Several, in fact, refused to answer any further questions. Perhaps further collapsing of the categories would decrease this hostility.

3. As with the stallholders, the consumers responded poorly to the open-ended questions. The question relating to the use of the market provoked irritability on some occasions, with the consumer indicating that his reasons for use were exactly the same as his likes for the market. The use of pre-coded categories here may have led to more meaningful information. It could be that consumers felt rushed with shopping and were more willing to respond with checked items rather than thought items.

4. The Consumer Self-Actualizing Test had many deficiencies. It evoked some objection from consumers on the relevancy to farmers' markets. The forced choice between two items was too limiting in several cases. A rank ordering giving several alternatives may give a more accurate measurement of consumer self-actualization.

   It is possible that a test of this type cannot be properly administered when people are in a setting such as a market. Sampling was done at the conclusion of the shopping when people were loaded with parcels and were quite possibly eager to leave. Previous administrations of this instrument were conducted in more controlled settings.

5. The validity and reliability of the semantic differential scale with these particular bi-polar phrases was not obtained. The validity of the responses is high for Martin's sample since the technique to determine the dimensions was of a projective nature. However, Martin's sample size was small and the validity was not established for a large population.

6. The researcher used her own judgement in selecting dimensions from Martin's study. Another researcher may not have included some categories and may have added others.

7. The semantic differential scale was arranged so that all positive phrases were on the left. This minimizes confusion of the respondent but could lead to uniformity of responses.

8. The markets themselves differ in physical layout, which led to differences in consumer's willingness and ability to complete the questionnaire. Several markets had a coffee and sitting area where the interviewer and respondent could sit comfortably to complete the questionnaire. In other markets, facilities were small and crowded and an area to conduct the interview was nonexistent. On two occasions, plans to conduct interviews had to be cancelled on the basis of the inadequate physical facilities.

9. Problems were found in obtaining the sample. Although the interviewers tried to question every fifth consumer, there were problems when the crowds were at their peak as more than five consumers would leave while the interviewers were conducting an interview. The refusal rate was high with people not speaking English well and with people accompanied by young children. Other refusals were not as easily categorized and their demographic information is lacking. Consequently, some people may be under-represented in the sample, or conversely some types of consumers may be over-represented. The refusal rate was high and tended to be demoralizing to the researchers.

10. The produce available at the markets varied considerably with the timing of the interviews. Interviews conducted in late July and early August were done at markets with low amounts of produce for sale. It would have been preferable to have sampled all the Alberta markets within the same week so that availability of supplies would be held more constant.

Implications for Further Research

The author has indicated that her primary focus for this research was on the consumer. The review of the literature revealed the paucity of research done in the areas of market management and retail practices. The descriptive nature of this present research left many questions unanswered. Selection of location, type of facilities, days and hours of operation and recruitment of stallholders need more analysis to give direction to market management. The reasons stallholders use a farmers' market to sell their produce needs development, as do the advantages and disadvantages of retailing through a farmers' market. Thorough investigation of these retailing practices may make it easier to recruit new stallholders and to further improve the markets.

The poor quality of the Consumer Self-Actualizing Test is evident throughout this research. The inadequacies of this test demonstrates the need for a better test for consumer self-actualization.

The high refusal rate of consumers in this type of study is an area which in itself could be the basis for further research. Only

through the co-operation of consumers can their concerns be brought to farmers' market boards. If researchers were more aware of why people do not wish to be interviewed, perhaps some change in techniques or procedure could be made to provide for a more adequate response rate.

Recommendations for Farmers' Markets

Although many recommendations have already been made in the discussion of the results of the interviews, there are other areas where changes could benefit the markets.

1. With more support and guidance from Alberta Agriculture, a number of markets could be revitalized. Several markets are having serious problems with producer recruitment and lack of customers. The consumers who did attend these markets were enthusiastic about the concept of farmers' markets but were disappointed by the inadequacies of the individual market.
2. More communication is needed between the different markets. Some markets were poor, yet the market managers were happy with them. The best markets wanted to know from this researcher how to improve their market; the poorest markets were complacent. This author is of the opinion that ideas and communication from the good markets will provide stimulus and encouragement to the poorer markets.
3. More advertising is definitely needed. Many stallholders commented personally to the researcher about the lack of advertising; consumers asked where and when various markets were held. Edmonton Reports, August 2, 1976 carried an advertisement for markets that many consumers mentioned for the next few weeks. Unfortunately, this advertisement had several errors in the dates, times and places

of market operation which could discourage the marginal user of a market. Perhaps current information on farmers' markets could be given to Tourist Information Booths. Surprisingly, several Tourist Information Booths where this researcher stopped were unaware of the markets' very existence in their vicinities.

4. Many markets are not making use of highway signs, although they are available from Alberta Agriculture. The highway sign should indicate, as well as minimal information, the direction to travel to reach the market. Several times, questions at service stations, retail outlets and Tourist Information Booths failed to elicit information about the location of the market.

5. Fewer stalls than five present the consumer with little justification for making the trip to the market. A minimum of five stalls appears to give an adequate market providing there is variety in the produce and crafts sold.

6. The waiting time to determine the price deterred consumers from asking and perhaps purchasing in crowded markets. Several consumers who did not have time or were not willing to complete the survey indicated verbally their annoyance at the lack of price displays.

7. Crowds presented a problem in a few markets. Although one consumer at Edmonton City Market commented that the crowded facilities contributed to the atmosphere, this person was in the minority. A number of markets arranged for a central coffee area where people could relax and enjoy themselves, but this was not possible in the most crowded markets. Larger facilities would enable the markets to provide this "social" area.

8. Parking problems were most notable (and drew much criticism) at Edmonton City Market. The central location of this market is excellent for many consumers but it does necessitate many shoppers to bring a car. Lareg Ontario markets have established themselves in enclosed parking areas which helps to alleviate this problem, but still can maintain the rustic atmosphere.
9. The Kitchener-Waterloo farmers' market has capitalized on the presence of the Mennonite community. Alberta farmers' markets have the opportunity to do this with various ethnic communities, but the ethnic component of the market here is almost non-existent and when present is not very visible. Although there were no comments on this by consumers, the success of the Kitchener market would indicate that this type of promotion has positive appeal.

Conclusions

Farmers' markets are viable in Alberta. They encourage the small farmer to produce vegetable crops since they are a convenient outlet for the produce. They have met with excellent consumer acceptance as seen from the rapid growth of the markets and the positive opinions found in this study. Continued encouragement and support of the markets by Alberta Agriculture will help to maintain and improve them beyond the initial novelty phase.

BIBLIOGRAPHY

Alberta Agricultural Products Marketing Council: An Inquiry into the Production and Marketing of Vegetables in Alberta. Alberta: Alberta Agriculture, 1973.

Alberta Agriculture. "Internal Memo", February 6, 1975. (Typewritten).

Alberta Agriculture. correspondence to the author. Spetember, 1975.

Alberta Agriculture. "To the Managers" date unknown. (Typewritten).

Alderfer, Clayton P. "An Empirical Test of a New Theory of Human Needs." Organizational Behavior and Human Performance. 4 (May 1969): 142-175.

Babbie, Earl R. Survey Research Methods. California: Wadsworth Publishing Co., 1974.

Brooker, George. "An Instrument to Measure Consumer Self-Actualization." In Advances in Consumer Research. 2, pp. 563-575. Edited by Mary Jane Schlinger. Chicago: University of Illinois, 1975.

Cobbledick, Robert. correspondence to the author. April 8, 1976.

Crowne, D. & D. Marlowe. "Social Desirability Scale." In Measures of Social Psychological Attitudes, pp 727-732. Edited by John R. Robinson & Phillip R. Shaver. Michigan: Survey Research Center, 1973.

Devine, D. Grant & Murray H. Hawkins. "Implications of Improved Information on Market Performance." Journal of Consumer Affairs. 6 (Summer 1972): 184-197.

Eiler, Doyle A. & David G. Rosenfeld. "Customers at Selected New York State Roadside Markets." Cornell University Agr. Exp. Sta. A.E. Res. 73-12. Ithaca, New York, 1973.

Ewanyk, Linda. "Potatoes - Consumer Opinions and Retail Practices." M.Sc. thesis, University of Alberta, 1972.

Faryna, Paulette. "Farmers' Markets in Alberta: A Study of Consumer Attitudes and Usage Patterns." Alberta: Alberta Agriculture, 1973.

Goble, Frank G. The Third Force: The Psychology of Abraham Maslow. New York: Grossman Publishers, 1970.

Goodman, R.A. "On the Operationality of the Maslow Need Hierarchy." British Journal of Industrial Relations. 6 (March, 1968): 51-57.

Green, Paul E. & Vithala R. Rao. "Rating Scales and Information Recovery - How Many Scales and Response Categories to Use?" Journal of Marketing. 34 (July, 1970): 33-39.

Hall, Douglas T. & Khalil E. Nougaim. "An Examination of Maslow's Need Hierarchy in an Organizational Setting." Organizational Behavior and Human Performance. 3 (1968): 12-35.

Hausher, Lloyd. "Concerns and Suggestions of Vegetable Producers to the Farmers' Market Managers." Text of a talk to the 3rd annual Alberta Farmers' Market Seminar, Edmonton, Alberta. March 11, 1977.

Hole, Lois. "Farmers' Markets from a Producer's Standpoint." Text of a talk to the 3rd annual Alberta Farmers' Market Seminar, Edmonton, Alberta. March 11, 1977.

Hughers, G. David. Attitude Measurement for Marketing Strategies. Illinois: Scott Foresman and Co., 1971.

Huizinga, Gerard. Maslow's Need Hierarchy in the Work Situation. Graningen: Wolters-Noordhoff Publ., 1970.

International Study Project Inc., Abraham H. Maslow: A Memorial Volume. compiled with the assistance of Bertha G. Maslow. California, Brooks/Cole Publishing Co., 1972.

Kassarjian, Harold H., "Personality and Consumer Behavior: A Review in Perspectives in Consumer Research. pp. 129-148. Edited by H.H. Kassarjian and T.S. Robertson. Illinois: Scott Foresman and Company, 1973.

Kerlinger, Fred N. Foundations of Behavioral Research: Educational and Psychological Inquiry. New York: Holt, Rinehart and Winston Inc., 1964.

Kohls, Richard and W. David Downey. Marketing Agricultural Products. 4th ed. New York: The MacMillan Co., 1972.

Kuhlmann, Dietrich. "Message from the Alberta Fresh Vegetable Marketing Board." Text of a talk to the 3rd annual Alberta Farmers' Market Seminar, Edmonton, Alberta, March 11, 1977.

Lawler, Edward E, III and J. Lloyd Suttle. "A Causal Correlation Test of the Need Hierarchy Concept." Organizational Behavior and Human Performance. 7 (April, 1972): 265-287.

Martin, Heather J. "Dimensions Used by Consumers to Evaluate Foods and the Marketplace." M.Sc. thesis, University of Alberta, 1976.

Maslow, Abraham H. Toward a Psychology of Being. 2nd ed. New York: D. Van Nostrand Co., 1968.

Maslow, Abraham H. "A Theory of Metamotivation: The Biological Rooting in the Value Life." In The Healthy Personality: Readings. pp. 35-36. Edited by H.M. Chiang and Abraham H. Maslow. New York: Van Nostrand Reinhold Co., 1969.

Maslow, Abraham H. Motivation and Personality. 2nd ed. New York: Harper and Row Publishers, 1970.

Maslow, Abraham H. "Some Basic Propositions of a Growth and Self-Actualization Psychology." In Personality: Readings in Theory and Research. pp. 223-234. Edited by Eugene A. Southwell and Michael Merbaum. California: Brooks/Cole Publ. Co., 1971.

Maslow, Abraham H. "A Theory of Human Motivation." In Dominance, Self-Esteem and Self-Actualization: Germinal Papers of A.H. Maslow. pp. 153-173. Edited by Richard Lowrey. California: Brooks/Cole Publ. Co., 1973.

Maslow, Abraham H. "Self-Actualizing People: A Study of Psychological Health." In Dominance, Self-Esteem and Self-Actualization: Germinal Papers of A.H. Maslow. pp. 177-201. Edited by Richard Lowrey. California: Brooks/Cole Publ. Co., 1973.

McFadyen, Sheila. "Consumer Food Shopping Habits." Alberta Department of Agriculture. Homedex 1170. Edmonton, Alberta. 1974.

Meadows, Donella H., Dennis L. Meadows, Jørgen Randers and William W. Behrens III. The Limits to Growth. New York: The New American Library, Inc., 1972.

Mindak, William A. Fitting the Semantic Differential to the Marketing Problem." In Semantic Differential Techniques. pp. 618-623. Edited by James G. Snider and Charles E. Osgood. Chicago: Aldine Publ. Co., 1969.

Nie, Norman H., G. Hodlai Hull, G. Jenkins, Karen Steinbrenner and Dale H. Bent. Statistical Package for the Social Sciences. 2nd ed. New York: McGraw-Hill Book Co., 1975.

Nunnally, Jum C. Jr. Introduction to Psychological Measurement. New York: McGraw-Hill Book Co., 1970.

Osgood, Charles E., George J. Suci and Percy H. Tannenbaum. The Measurement of Meaning. Chicago: University of Illinois Press, 1957.

Osgood, Charles E. and Percy H. Tannenbaum. "The Principle of Congruity in the Prediction of Attitude Change." In Attitude Theory and Measurement. pp. 301-311. Edited by Martin Fishbein. New York: John Wiley and Sons, Inc., 1967.

Payne, Roy. "Factor Analysis of a Maslow-Type Need Satisfaction Questionnaire." Personnel Psychology 23 (1970): 251-268.

Porter, K.D., J. Dunn and P.D. Hargrave. A Feasibility Study to Determine the Requirements for the Expansion of the Fresh Vegetable Industry in Alberta." Alberta: Alberta Department of Agriculture, 1973.

Porter, Lyman W. "A Study of Perceived Need Satisfactions in Bottom and Middle Management Jobs." Journal of Applied Psychology. 45. (February 1961): 1-10.

Porter, Lyman W. "Job Attitudes in Management: I. Perceived Deficiencies in Need Fulfillment as a Function of Job Level." Journal of Applied Psychology. 46 (December, 1962): 375-384.

Rhinehart, J.B., R.P. Barrell, A.S. DeWolfe, J.E. Griffin and F.E. Spanner. "Comparative Study of Need Satisfactions in Government and Business Hierarchies". Journal of Applied Psychology. 53 (June 1969): 230-235.

Rosenthal, Robert and Ralph L. Rosnow. Artifacts in Behavioral Research. New York: Academic Press, 1969.

Siegal, Sidney. Nonparametric Statistics. New York: McGraw-Hill Book Co., 1956.

Smith, Melvin W. and W.E. Cravens. "Retail Farmers' Markets as a Means of Direct Sales to Consumers." Ohio Agricultural Exp. Sta. Research Bulletin 913. Wooster, Ohio. 1962.

Statistics Canada. Income Distribution by Size in Canada, 1975. Cat. No. 13-307. Ottawa: Statistics Canada.

Statistics Canada. Canada Yearbook., 1975. Ottawa: Statistics Canada.

Thomsen, Frederick L. Agricultural Marketing. New York: McGraw-Hill Book Co. Inc., 1951.

Toothman, James S. "How Pennsylvania Producers Use Farmers' Markets to Increase Sales and Profits." Text of Illustrated presentation made at 15th Annual Roadsice Marketing Conference. Columbus, Ohio. January 6, 1975.

Walsh, Thomas M. "Maslow's Theory of Motivation: A Theory for testing the Constructs." Ph.D. dissertation: University of Oregon, 1968.

Waugh, Frederick Vail. Quality as a Determinant of Vegetable Prices. 1968 ed. New York: AMS Press Inc., 1968.

APPENDICES

APPENDIX A: INTRODUCTORY LETTER

403·432·3824

FACULTY OF HOME ECONOMICS
THE UNIVERSITY OF ALBERTA · EDMONTON, CANADA T6G 2E2

I am a graduate student at the University of Alberta, presently working on a master's thesis on the use and operations of farmers' markets in Alberta. The main objectives of this study are:

1. To classify, define and analyze the operations of farmers' markets in Alberta.

2. To compare quality and prices of farm products marketed through farmers' markets with those marketed in Supermarkets.

3. To catalogue the reactions and preferences of consumers to products sold in farm markets and to the operations of the markets themselves.

4. To develop a set of guidelines for agricultural products which would enable them to improve sales through this growing market outlet.

During the course of my study, I will be contacting all the farmers' markets, either in person or by telephone, to complete a short questionnaire. I will be most happy to provide you with a summary of my findings at the conclusion of the study.

Yours truly,

Anne Westervelt

AW*dam

APPENDIX B: GENERAL QUESTIONNAIRE FOR ALL MARKETS

General Questionnaire For All Markets

1. What organization(s) sponsor(s) this market?

2. Do you have any restrictions concerning who is allowed to sell at the market? Yes____ No ____

   If yes ... what are these restrictions?

3. How many stall holders operate from this market?

   minimum ____
   average ____
   maximum ____

4. What is the size of the stalls?

5. What is the rental fee for stallholders?

   daily _____
   weekly _____
   monthly _____
   seasonal _____

6. How many months per year do you operate? _____

7. What are the days and hours of operation?

8. What products do you sell at the market?

beans	____	parsnips	____	eggs	____
beets	____	peas	____	meat	____
cabbages	____	potatoes	____	poultry	____
carrots	____	pumpkins	____	handicrafts	____
cauliflower	____	squash	____	home baking	____
corn	____	tomatoes	____	honey	____
cucumbers	____	turnips	____	leather goods	____
lettuce	____	Alberta fruit	____	others - list	____
onions	____	B. C. fruit	____		

9. What are your parking facilities?

10. Do you make use of information leaflets? Yes ____ No ____

11. What types of promotion techniques do you use? 2

newspapers (local)	____	road signs	____
radio stations	____	flyers	____
posters	____	others	____

12. Do you have a market manager? Yes ____ No ____

Is this position voluntary? Yes ____ No ____

What are his duties?

13. How many years has your market been operating? _____

Has it always been at this location? Yes ____ No ____

What was the reason for moving?

14. What is the total area of selling space? _____

15. How far are you from the business section of town?

16. Why do you think consumers use the farmer's markets?

APPENDIX C: RETAILER QUESTIONNAIRE

Retailer's Questionnaire

1. What products do you sell at the market?

beans	___	parsnips	___	eggs	___
beets	___	peas	___	meat	___
cabbage	___	potatoes	___	poultry	___
carrots	___	pumpkins	___	handicrafts	___
cauliflower	___	squash	___	home baking	___
corn	___	tomatoes	___	honey	___
cucumbers	___	turnips	___	leather goods	___
lettuce	___	Alberta fruit	___	others -list	
onions	___	B. C. fruit	___		

2. Do you produce all these products at your own operation?

Yes ____ No ____

If no, where do you obtain these extra products?

purchase from close farm ____
import from another province ____
other - please explain

3. What is the amount of acreage devoted to production for the farmer's market?

0-3	___	12-15	___	23-27	___
4-7	___	16-19	___	28-31	___
8-11	___	20-23	___	More than 32	___

4. Who supplies your "production labor"?

self	___	
husband	___	
wife	___	
children	___	
hired help	___	
other	___	Specify ___

5. Who supplies your "marketing labor"?

self	___	
husband	___	
wife	___	
children	___	
hired help	___	
other	___	Specify ___

6. How far is your farm from the farmer's market?

0-4 miles	___	15-19 miles	___	over 30 miles	___
5-9 miles	___	20-24 miles	___		
10-14 miles	___	25-29 miles	___		

7. How many hours per week do you spend at the market?

0-4 hours	____	15-19 hours	____	more than 30 hours	____
5-9 hours	____	20-24 hours	____		
10-14 hours	____	25-30 hours	____		

8. How often do you sell at the farmer's market?

more than once a week	____
once a week	____
every other week	____
once a month	____
less than once a month	____

9. How do you determine the price of your products?

supply and demand	____	Alberta Agriculture Bulletin	____
wholesale prices	____	cost of production	____
quality of produce	____	past prices	____
retail store prices	____	weather conditions	____
other stall prices	____	other	____

10. What influences you to change prices on a particular day?

supply and demand	____	Cost of production	____
wholesale prices	____	past prices	____
quality of produce	____	weather conditions	____
retail store prices	____	time of day	____
other stall prices	____	other	____
Alberta Agriculture bulletin	____		

11. How do you determine the quantity of produce to bring to market?

amount of produce available at farm	____	quality of produce	____
estimated sales	____	truck size	____
weather conditions	____	other	____
amount of help	____		

12. What percentage of your customers do you consider regular customers?

0-10%	____	31-40%	____
11-20%	____	41-50%	____
21-30%	____	over 50%	____

13. What do you do with unsold produce?

14. Why do you use a farmer's market to sell your produce?

15. What are the valuable assets of this (particular) market for you?

16. What are the problems in this (particular) market for your operation?

17. What is needed to improve this (particular) market?

APPENDIX D: CONSUMER QUESTIONNAIRE

QUESTIONNAIRE FOR FARMER"S MARKET CONSUMER

1. Male _____ Female _____

2. Do you usually shop here alone? Yes _____ No _____

If no, with whom do you shop?

husband/wife ____ children ____ family ____
neighbor ____ neighbor ____ friend ____
relative ____ other ____

3. What is your age on your last birthday? Just give the letter for the age group that matches. _____

A) 15-24 yr. C) 36-45 yr. E) 56-65 yr.
B) 25-35 yr. D) 46-55 yr. F) over 65 yr.

4. What level of education did you and your husband/wife complete? Just give the letter that fits for each of you.

Wife _____ Husband ____

A) less than high school D) apprenticeship
B) high school E) some university
C) vocational/technical F) university degree or diploma

5. What is your occupation? _____

Your husband/wife's occupation? _____

6. What was your total family income reported on your income tax return last year? Just give the letter for the range that fits. _____

A) under $4999 D) 15,000-19,999
B) 5,000-9,999 E) 20,000-24,999
C) 10,000-14,999 F) 25,000 and over

7. How many children do you have living at home in each of the age categories listed below?

0-4 years ____ 10-14 years ____
5-9 years ____ 15-18 years ____

8. Distance travelled to reach Farmer's Market

0-4 miles ____ 15-19 miles ____
5-9 miles ____ over 20 miles ____
10-14 miles____

9. How many times a year do you visit the Farmer's Market

more than 25 times	____	2 - 3 times	____
12 - 24 times	____	once	____
3 - 12 times	____		

10. What products do you buy at the market?

beans	__	parsnips	__	eggs	__
beets	__	peas	__	meat	__
cabbages	__	potatoes	__	poultry	__
carrots	__	pumpkins	__	hanidcrafts	__
cauliflower	__	squash	__	home baking	__
corn	__	tomatoes	__	honey	__
cucumbers	__	turnips	__	leather goods	__
lettuce	__	Alberta fruit	__	others - list	__
onions	__	B.C. fruit	__	_____	
				_____	

11. As an estimate, what percentage of your grocery shopping is done at farmer's market?

0 - 10%	____	21 - 30%	____	41 - 50%	____
11 - 20%	____	31 - 40%	____	51% or more	____

12. What do you like best about the farmer's market?

13. What do you like least about the farmer's market?

14. Why do you use the farmer's market?

THE CONSUMER SELF-ACTUALIZATION TEST

Read each of the following statements from 1 - 17. From each pair, circle the letter A or B, whichever is closest to your personal opinion.

1. A I prefer using information from magazines like Consumer Reports when making expensive purchases.

   B I prefer to talk to friends and relatives to learn their experiences with appliances and other expensive items, before I make a purchase.

2. A Usually, I am not upset when products are not as good as I thought they would be.

   B I am often upset when products are not as good as I thought they would be.

3. A When I help a friend buy something, it's enough to know that my help was needed.

   B When I help a friend buy something, I think that it's only right that my friend thanks me for my help.

4. A All people are worthy of respect.

   B Some people are not worthy of respect.

5. A It is more fun to give a gift than to decide what to give.

   B Deciding what to give for a gift is as much fun as giving it.

6. A I usually feel more confident when I know I am dressed in the latest fashion.

   B I am at ease regardless of how I am dressed.

7. A When I am shopping for myself, I make decisions without help from others.

   B I often look to people I know for help when buying something for myself.

8. A Money may not be everything, but it's got a big lead over whatever is second.

   B It's true, money can't buy happiness.

9. A The things that I want in my life are often different from the things that my friends want.

   B The things that I want in my life are similar to the things that my friends want.

10. A I am often bored.

    B I am seldom bored.

Consumer Self Actualization Test (cont'd)

11. A I enjoy doing volunteer work for the community and for charities.
    B I am so busy with my own life that I can't manage volunteer work.

12. A I prefer comedians who imitate famous people such as John Wayne.
    B I prefer comedians who comment on the present time, (politics, Olympics).

13. A When I go on a buying spree, I often regret it later.
    B I seldom regret a buying spree.

14. A Being in fashion holds no interest for me.
    B It is important to me to be in fashion.

15. A When I am nervous or anxious, I usually try to avoid buying things.
    B When I am nervous or anxious, I often find buying something new helps me feel better.

16. A It is usually wise to present yourself to people in such a way that they will like you.
    B It is unwise to present anything buy your true self to people.

17. A I am reluctant to try new products until I can find out if they're good.
    B I often try new things because they look interesting or good.

Instructions:

Each of the following questions 1-18 deals with a specific characteristic of this market. Please read each pair of descriptive terms and place an X on the line in the spot which best describes the listed characteristic as you see it. There are no right or wrong answers. This is your personal opinion only.

For example the terms could indicate interesting or dull, boring. If you felt that the market was very dull you would indicate as follows:

interesting : : : : : : X : dull, boring

for fairly dull:

interesting : : : : : X : : dull, boring

for very interesting:

interesting : X : : : : : : dull, boring

for fairly interesting:

interesting : : X : : : : : dull, boring

Please do all the questions.

Do them quickly. It is your first reaction to these questions which is important. It should take about one minute to do this page.

1.	fruits and vegetables are fresh	: : : : : : : :	fruits and vegetables lack freshness
2.	good quality fruits and vegetables	: : : : : : : :	poor quality fruits and vegetables
3.	convenient location	: : : : : : : :	inconvenient location
4.	wide variety of items	: : : : : : : :	less variety
5.	convenient hours	: : : : : : : :	limited hours
6.	more parking space	: : : : : : : :	less parking space
7.	clean	: : : : : : : :	less clean
8.	reasonable prices	: : : : : : : :	high prices
9.	nice atmosphere for shopping	: : : : : : : :	not a nice atmosphere for shopping
10.	the consumer is not pressured to buy	: : : : : : : :	the consumer is pressured to buy
11.	personal service	: : : : : : : :	impersonal service
12.	takes little time to get waited on	: : : : : : : :	takes longer to get waited on
13.	like appearance of market	: : : : : : : :	don't like appearance of market
14.	roomy	: : : : : : : :	crowded (cluttered)
15.	smells good	: : : : : : : :	smells bad
16.	attractive displays	: : : : : : : :	unattractive displays
17.	adequate highway signs for market	: : : : : : : :	inadequate highway signs for market
18.	more natural foods	: : : : : : : :	not as natural foods

APPENDIX E

TABLE 14

Percentage and Frequency Distribution of Retailers Selling Varieties of Produce at the Market

Produce or Product		
Beans	77.4	(24)
Beets	87.1	(27)
Cabbage	87.1	(27)
Carrots	83.9	(26)
Cauliflower	83.9	(26)
Corn	64.5	(20)
Cucumbers	71.0	(22)
Lettuce	77.4	(24)
Onions	74.2	(23)
Parsnip	45.2	(14)
Peas	74.2	(23)
Potatoes	80.6	(25)
Pumpkins	45.2	(14)
Squash	45.2	(14)
Tomatoes	71.0	(22)
Turnip	51.6	(16)
Alberta Fruit	19.4	(6)
Eggs	32.3	(10)
Meat	3.2	(1)
Poultry	6.5	(2)
Handicrafts	22.6	(7)
Homebaking	16.1	(4)

Table 14 - Continued

Honey	12.9	(4)
Leather Goods	9.7	(3)
Other Items	22.6	(7)

TABLE 15

Percentage and Frequency Distribution of Acreage Used for Production of Vegetables for Sale at Farmers' Markets

Acreage	Frequency	Adjusted Percentage
0 - 3	16	55.2
4 - 7	9	31.0
8 - 11	2	6.9
28 - 31	2	6.9
No Answer	2	Missing
Total	31	100

TABLE 16

Percentage and Frequency Distribution of Persons Used to Supply Labour in Production and Marketing of Vegetables for Farmers' Markets

People	Production	Marketing
Self	16.1 (5)	16.1 (5)
Husband	3.2 (1)	0 0
Children	3.2 (1)	0 0
Family	45.2 (14)	61.3 (19)
Family & Hired Help	22.6 (7)	6.5 (2)
Other	9.7 (3)	12.9 (4)
No Answer	0 0	3.2 (1)

TABLE 17

Percentage and Frequency Distribution of the Distance Travelled to the Market by Retailers

Distance to Market	
0 - 4 Miles	27.6 (8)
5 - 9 Miles	13.8 (4)
10 - 14 Miles	13.8 (4)
15 - 19 Miles	13.8 (4)
20 - 24 Miles	6.9 (2)
Over 30 Miles	24.1 (7)
No Answer	Missing (2)
	100

TABLE 18

Percentage and Frequency Distribution of Time Spent in Marketing

Hours of Marketing Time			How Often at Market		
0 - 4	47.6	(14)	More than once a week	33.3	(10)
5 - 9	26.7	(8)	Once a Week	56.7	(17)
10 - 14	16.7	(5)	Every Other Week	3.3	(1)
15 - 19	3.3	(1)	Once a Month	6.7	(2)
25 - 30	3.3	(1)	No Answer	Missing	(1)
Over 30	3.3	(1)			
No Answer	Missing	(1)			
	100	(31)			

TABLE 19

Percentage and Frequency Distribution of Pricing Policies

	Originally Determine*		Change*	
Supply and Demand	45.2	(14)	41.9	(13)
Wholesale Prices	12.9	(4)	6.5	(2)
Quality of Produce	32.3	(10)	19.4	(6)
Retail Prices	16.1	(5)	6.5	(2)
Other Stall Prices	41.9	(13)	35.5	(11)
Alberta Agriculture Bulletin	35.5	(11)	12.9	(4)
Cost of Production	16.1	(5)	9.7	(3)
Past Prices	3.2	(1)	0	(0)
Weather Conditions	6.5	(2)	6.5	(2)
Other	3.2	(1)	6.5	(2)
Time of Day (for changing prices only)			16.1	(5)

* Percentage total is greater than 100 since more than one response was allowed.

TABLE 20

Percentage and Frequency Distributuion for Methods of Estimating the Amount of Produce to Bring From the Farm*

Methods of Estimating	
Amount at Farm	48.4 (15)
Estimated Sales	38,7 (12)
Weather Conditions	9.7 (3)
Amount of Help	16.1 (5)
Quality of Produce	19.3 (6)
Truck Size	6.4 (2)
Other	9.6 (3)

* Percentage total is greater than 100 since more than one response was amount.

TABLE 21

Percentage and Frequency Distribution for Methods of Disposing of Unsold Produce

Disposal Method	
Take Home	20.7 (6)
Process	34.5 (10)
Throw Away	3.4 (1)
Donate to Charity	17.2 (5)
Put in Cooler and Sold at Later Date	13.8 (4)
Sold Locally	3.4 (1)
Never Had Unsold Produce	6.9 (2)
No Answer	Missing (2)
	100 (31)

TABLE 22

Percentage and Frequency Distribution of Regular Customers of Retailers

Percent of Customers Regular		
0 - 10	25.9	(7)
11 - 20	25.9	(7)
21 - 30	7.4	(2)
31 - 40	7.4	(2)
41 - 50	22.2	(6)
Over 50	11.1	(3)
No Answer	Missing	(4)

TABLE 23

Percentage and Frequency Distribution of Reasons for Using Farmers' Market

Reasons		
Convenience of Market	61.6	(16)
Social Aspects	15.4	(4)
Profit	17.2	(5)
Other	3.8	(1)
No Answer	Missing	(5)
	100	(31)

TABLE 24

Percentage and Frequency Distribution of Retailers' Opinions of Markets

Assets of Market		
Ease of Selling	22.6	(7)
Convenience	12.9	(4)
Low Costs	6.5	(2)
Location	9.7	(3)
Other	3.2	(1)
No Answer	45.2	(14)
	100	(31)
Problems in Market		
Facilities	12.9	(4)
Lack of Advertising	9.7	(3)
Lack of Customers	6.5	(2)
Other	22.6	(7)
No Answer	48.4	(15)
	100	(31)
Improvements Needed		
Better Facilities	12.9	(4)
Increased Advertising	22.6	(7)
Better Provision for Parking	6.5	(2)
More Customers	6.5	(2)
Refrigeration	3.2	(1)
Improved Facilities and Increased Advertising	12.9	(4)
No Answer	35.5	(11)
	100	(31)

APPENDIX F

TABLE 25

D) Items Purchased at Farmers' Markets by Survey Respondents*

Category (Produce or Product)	Frequency	Percent
Beans	57	29.5
Beets	61	31.6
Cabbage	68	35.2
Carrots	83	43.0
Cauliflower	69	35.8
Corn	65	33.7
Cucumbers	77	39.9
Lettuce	52	26.9
Onions	65	33.7
Parsnips	16	8.3
Peas	69	35.8
Potatoes	97	50.3
Pumpkins	11	5.7
Squash	24	12.4
Tomatoes	90	46.6
Turnip	23	11.9
Alberta Fruit	47	24.4
B.C. Fruit	67	34.7
Eggs	78	40.4
Meat	12	6.2
Poultry	22	11.4
Handicrafts	32	16.6
Homebaking	63	32.6

Honey	60	31.1
Leather Goods	3	1.6
Other	44	22.8

*Percentage totals more than 100 since respondents allowed more than one answer.